SECOND SERIES VOL. V, No. 2

BULLETIN

OF

THE NEW YORK

ACADEMY OF MEDICINE

FEBRUARY, 1929

INSTITUTED 1847

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EDITORIAL

THE EVIL SPOKEN OF PHYSICIANS AND THE ANSWER THERETO

In the initial volume of the Proceedings of the Charaka Club, Dr. Dana has already handled the negative aspect of this theme.[1] He has not only isolated the hardest and meanest sayings against our profession, but has classified them with reference to their stereotypy and their relative futility. He began (he says) to collect such things in a scrap-book, then finding that their monotonous sameness rather bored and discouraged him, he finally discovered that the thing had already been done in the 17th century by Bernier and latterly in three volumes by Witkowski, entitled *Le mal qu'on a dit des médecins.* Dana notes that the multifarious indictments of medicine in the past fall easily into sets of trite monotones or categories. These rusty weapons and damp ammunition, formerly employed so continuously to belittle our profession, ran, as a rule, to some such types as the following:

1. The doctor usually kills rather than cures.
2. Nature, left to herself, will usually heal the patient, but drugging may harm or kill him.
3. The doctor is a pompous, pedantic, ceremonious duffer, who talks learnedly out of books to conceal his ignorance of reality.
4. In medical consultations, the patient is slain by the *force majeure* of numbers.
5. The demands of professional ethics and etiquette were formerly such, that it was deemed better for a patient to die by rule (*secundum*

[1] C. L. Dana: *Tr. Charaka Club,* N. Y., 1902, I, 77-90. The object of this editorial is to supplement the contributions of Witkowski, Dana and others by some other findings, collected over a number of years.

artem) than to recover in defiance of medical principles. This affectation of legality or pontifical infallibility is, and has been, the weak link (in the eyes of enemies, the crooked element) in medical practice. It is here naturally that the quack finds his opportunity and gets his innings.

6. The doctor trades upon illness, gets rich through the prevalence of disease, whenever it does not affect himself or impoverish his clientèle. He is one of the few professional people who is not punishable for murder. He is, in fact, hand in glove with the undertaker.
7. He pours medicines, of which he knows little, into bodies of which he knows less.

For over twenty-five centuries, at least, these stereotyped slurs were cast up against physicians without let or hindrance. Why? Dr. Dana answers this question elsewhere, as follows: "Of all sciences, the medical have been the slowest in growth . . . In the history of medicine, there is no more notable feature than this prolonged absence of all real progress." [2] Before 1850, in fact, the history of medicine is a somewhat gloomy recital of ups and downs, like Carlyle's account of walking, in which progression is made as much by falling as by rising. In each period, there was the same illusion of progress, but, in retrospect, the sombre truth in Lecky's lines seems all too patent:

"Still the world seems mounting higher,
Chasing unfulfilled desire,
Spurning barrier, prop and chain,
Scatt'ring darkness, conquering pain,
Winning much, but in each prize,
Some sad germ of evil lies;
For the subtle taint that blends
With all human hopes and ends,
Making good the seed of ill,
Rules the course of nations still."

The physician of the past was the creature of his *milieu*, and, as ancient medicine lagged almost continually behind the other sciences, his occasional manslaughterings and malpractice did but reflect his ignorance and incompetence and perhaps even blunted his ethical feeling. The confidence and respect accorded to a competent physician

[2] C. L. Dana: *The Peaks of Medical History*. New York, 1927.

to-day, even in the greater scientific academies of the world, is due in part to physics and chemistry, the *impetum facientes* of scientific medicine, and to the sterling, honorable character of such comparatively recent medical men as John Hunter, who boldly inoculated himself with a dangerous disease, or Bichat, Bretonneau, Laennec, Louis, Bright, Addison, Hodgkin, Virchow, Helmholtz, Huxley, Charcot, Littré, Lister. Names of this particular ethical lustre begin to swarm in the modern period, but appear as rare beacon lights, *longo intervallo,* in antiquity and the not very distant past. An anecdote will illustrate just what this steady increase in physicians of unblemished honor implies. At a medical gathering I once attended, a guest resorted to the trite expedient of reading off the fatal terminations of the Hippocratic case-histories (25 in number) as an example of the killing propensities of our profession. Dr. Jacobi, whom I sat beside, expressed some impatience at this labored expression of "American humor" and went on to say that, in his recollection, hundreds of average practitioners had worked themselves well nigh to extinction, in honest effort to get their patients well. He added that a doctor with a poor reputation for recoveries would soon lose his clientèle. As Billings said: "The public is not always sagacious, but in the long run, it does somehow contrive to find out who are the skilled lawyers and doctors." One recalls a long succession of lay visitors at the Army Medical Museum, whose inquiries on this head were serious to the point of outlining their personal ailments ("money no object"). This being the case, modern medicine, as Dana observes, can endure any satire directed against it with provoking equanimity and "it is well for the knights of the pen to keep a sharp eye upon us and to pull out from the barrel an ancient jest from time to time as occasion requires."

Arranging some of these ancient jests in serial order of time, it is noticeable that each nation and each period had its peculiar line of attack, a view-point all its own. In antiquity, for instance, it is plain that the effective

sharpshooters came, not from the tribal Teutons, Gauls, Slavs or Caledonians, but from fairly sophisticated civilizations. The utterances of China and India suggest, somehow, that medicine in Asia could not have amounted to much before the invasion of Alexander the Great.

China

Medicine is one of the nine low trades. Chinese Folk Proverb.

A single untried popular remedy often throws the scientific doctor into hysterics. Chinese Folk Proverb.

To be a writer requires the wasting of paper: to be a doctor requires the sacrificing of lives. Su Tung Po.

Doctors cannot cure their own complaints. Huai Nan-tzu.

Cow's urine, the excreta of horses and the tops of old drums are collected and sold as remedies. Nan-Yu.

India

Even experienced and capable physicians, fertile in remedies, are tormented and harried by diseases, as gazelles by hunters. In spite of the decoctions and oils they swallow, they are broken by age, as are trees by mighty elephants.

Physicians live by rich patients, officials by unlucky princes, princes by litigants and clever men by fools.

Soldiers long for war, physicians for patients, clay for water, Brahmins for land and beggar-monks for the fat of the land.

Subtle, indeed, are sundry allusions to medicine in the Bible and the Talmud:

He who sins against his Creator must come into the hands of physicians. Jesus Sirach. xxxvi, 38.

In his disease he sought not to the Lord but to the physicians. And Asa slept with his fathers. II Chronicles, xvi, 15-16.

Physician, heal thyself. Luke, iv, 23.

And a certain woman, which had an issue of blood twelve years, and had suffered many things of many physicians, and had spent all that she had, and was nothing bettered, but rather grew worse. Mark, v, 25-26.

Do not live in a city governed by a physician. Talmud, Pesachim 113a.

A physician who heals for nothing heals in vain. Talmud, Baba Kama 85a.

The best of doctors will go to hell. Talmud, Kiduschin 82a.

The Greeks, as Spengler has beautifully shown, existed without reference to the past or the future. Their civiliza-

tion stands apart, like a closed system in physics. Their mathematics was mainly geometry, their historical records of late provenance, their medicine a thing complete in itself. The most extraordinary national culture which the world has known reposed upon a substratum of slavery and the raw blood-thirst of the primitive (Ægisthus, Thyestes). As Dr. John R. Oliver points out,[3] the Hippocratic Oath tells what medicine and the doctor *ought* to be, but what the average practitioner may have been is indicated in Æsop's fable of "The Incompetent Physician;" in Plato's account of the slave-doctors who treated slaves and the free-born doctors who found out about their patients from their friends (*The Law*); in Æschines' reference to the Iatreia as places of ill-fame (Speech against Timarchus). The satirical comments on medicine by the greater writers are those of a highly sophisticated intelligentsia, who had their dabblings in faith-cure and "New Thought":

Greece

Thou hast suffered sorrow and humiliation. Thou art forsaken of thy wits and art gone astray; and like an unskilled leech fallen ill, thou losest heart and canst not discover what remedies to minister to thine own disease. Æschylus: *Prometheus,* 472-475.

The surest sign of bad government and social anarchy is to find many judges and many physicians. Plato.

Physicians heal those among us whom they wish to heal and injure those whom they wish to injure, by cutting and burning them and putting them to expense as tribute, of which they apply little or nothing to the patients' welfare, and use the rest for themselves and their fellows. In fine, they take money as compensation, even from the patient's relatives or enemies, in order to kill him. Plato (*Politics,* v, 298).

None so stupid as grammarians, excepting physicians. Athenaeus.

Only physicians and judges can kill without being killed. Philemon.

In his youth, Aristotle dissipated his inheritance in debauchery, had to become a soldier, and even played the charlatan by selling quack remedies in markets. Epicurus.

'Tis not a skillful leech, who mumbles charms o'er ills that need the knife. Sophocles: *Ajax,* 581-582.

I am no poor-man's physician, you poor devil! Aristophanes: *Acharnians,* 1027.

[3] Oliver: *Internat. Clin.,* Phila., 1927, 37. ser., III, 237-247.

Clearly, there is not a single physician who wishes good health even to his intimate friends, nor a soldier who wishes peace for his country. Philemon.

How bad it would be for doctors if everybody else were well and thriving! Philemon.

Internists are seldom jealous of surgeons, nay they back up and recommend one another. Plutarch.

It is not the affair of a friend but of a sophist to bolster up his own reputation by the failings of others and to swagger in public like the surgeons, who do their operations in a theater to attract more money. Plutarch.

The Roman gibes reflect their definite contempt for Greek medicine.

Rome

Our forefathers did not blame medicine, but drugging and principally because it was plied as a trade to make a livelihood . . . and to this day, it alone, of all Greek arts, is held to be beneath Roman dignity, in spite of its rich rewards. Pliny the Elder, xxix, 16-17.

How many sick people did Themison kill in one autumn? Juvenal, x, 221.

Emperor Tiberius said that a man over sixty who can not take his own pulse is ridiculous, and to ask a doctor what is most digestible is as silly as to ask him what is sweet, bitter or sour. Plutarch.

I hate doctors because they are always making me eat the flesh of ducks. Petronius, *Satyricon* C. 56

It is striking that there is no art so incomprehensible or liable to change its methods oftener than medicine, as there is none other so lucrative. Pliny the Elder, xxix, 2.

Where do we find greater opportunity to poison or to become the inheritor of one's victims than in medicine? Or for adultery, even in imperial houses, as in the case of Eudemus with Livia and Valens with Empress Messalina? But that is not the fault of the art but of its practitioners. Pliny the Elder, xxix, 20.

Crudelem medicum intemperans aeger facit. Doctors are cruel with refractory patients. Publius Syrius.

Male secum agit aeger medicum qui heredem facit. Woe to the sick man who makes a physician his heir. Publius Syrius.

In the Middle Ages, medical practice sank into "almost unexampled degradation" (Allbutt). The clinical textbooks of the time were huge, well arranged and well indexed, but the information conveyed was meagre. Therapy was mainly herbal and showed little advance upon Pliny and Dioscorides, and, unless protected by great nobles and

prelates, the average internist or surgeon had usually the social status of a strolling player or vagabond. Like Chaucer's "parfit practisour," he "loved gold in especial," and took over some of the tricks of Arabian charlatanry to keep his patients or to wiggle out of tight situations. In this period arose the well known epigrams about professional jealousy (*Medicus medicum odit*), the atheistic tendencies of the profession (*Ubi tres medici, duo athei*), the doctor's license to lie (*Medico mentiri licet*) and to kill (*Medicis solis licet impune occidere*), his assimilation to the Cambodians in "Wang" with reference to fees (*Post mortem, medicus!*), as also his obligation to collect fees while the patient was still ailing (*Accipe dum dolet, post mortem medicus olet*). The spirit of Salerno is reflected in the apple-a-day distich of Friedrich von Logau, which Longfellow renders:

> "Joy and Temperance and Repose
> Slam the door on the doctor's nose."

In the Renaissance period, all the hard things said about the profession were reiterated by Petrarch and by the Welsh epigrammatist, John Owen (1560-1622), who sounded a new variation in the familiar *Dat Galenus opes*:

> "Dat Galenus opes, dat Jutinianus honores,
> Dumne sit patiens iste nec ille cliens.
> Galen gets wealth and Justinian honor, so long as
> the first is not sick and the second not a client."

Shakespeare's

> "Thou speak'st like a physician, Helicanus,
> Who minister'st a potion unto us
> That thou wouldst tremble to receive thyself"

was turned about by Bismarck: "Physicians still retain something of their priestly origin: they would gladly do what they forbid." Luther said: "Medicine makes sick patients, for doctors imagine diseases, as mathematics makes hypochondriacs and theology sinners." He despised physicians and seldom (if ever) paid them. Erasmus called them "torturers and harpies." Montaigne observes that the physicians of his time "know their Galen

well and their patients not at all," that "medicine is credited with every cure made by nature" and that "all cures are undertaken at the risk of human life. They carve us, burn us, deprive us of our food and our blood and lo! a step further and we are restored to health." In the 17th century, medical satire was spread upon a large canvas by Molière, who, upon the stage, ridiculed the doctor as never before. A neat gibe was that of Scarron—*"les doctes assassins que nous appellons médecins*—which preludes the age of intensive blood-letting (up to the time of Louis), when medicine came in for its hardest knocks at the hands of the literary. The old Roman caution about legacies is revived in a line of Crébillon *père* (*Rhadamiste*):

"Ah! doit-on hériter de ceux qu'on assassine?"

Another observer of the transition period, Leibnitz, introduces a new formula, which was to be copied for nearly two centuries: "I often say a great doctor kills more people than a great general." This was a favorite line of thought with Frederick the Great, who asked Zimmermann: "How many graveyards have you filled?" When Frederick asked another physician if his reputation was not based upon an initial hecatomb of 2000 patients, he met with the unexpected come-back that "the prowess of the greatest soldier of his time may well have cost millions of lives." This was probably the origin of the well worn platitude about the general who has slain his ten thousands. Frederick gave the Chevalier Taylor the title of Court Oculist (at his own request) and then told him that he had no need for his services himself and would hang him if he attempted to ply his art upon any of his subjects. In the same key, Addison opined that "When a nation abounds in physicians, it grows thin of people." Kant said: "Physicians think they do a lot for a patient when they give his disease a name." Lessing has a very modern fling at the sacerdotal aspect of the physician: "Haller, I hear, made it a fashion for physicians to die in the odor of sanctity. It was not always so, indeed a doctor's religion was once more suspect than that of a drama-

tic poet. How times have changed! We may yet see a doctor of theology writing on dysentery." And so it goes, up to the well-known sneer of Mephistopheles in Goethe's Faust or the epigram of Sir Astley Cooper: "The science of medicine is founded upon conjecture and improved by murder."

When we come to Voltaire's inquiry, "Who are the greatest deceivers? The doctors? and the greatest fools? The patients," we are well into the spirit of our own period. The essential feature of such medical satires as Samuel Butler's *Erewhon,* Octave Mirbeau's *L'Epidemie,* Jules Romain's *Knock,* Hermann Hesse's *Kurgast* or Michel Corday's *Les Embrasés* is that ridicule is transferred from the doctor to the patients, or at least to the ineptitudes of crowd psychology in encouraging quackery and incompetence in medicine. There is even a faint hint of this tendency in Tolstoi's sombre study, *The Death of Ivan Ilyich.* The patient has become, as it were, *particeps criminis* in relation to his own plight,[4] at any rate, some sort of a culprit. This is the ironic note in Butler's *Erewhon*: If a person is not in robust health, it is his own fault, an exaggeration which derives, perhaps, from the extraordinary improvement in public health occasioned by the conquest of communicable diseases, the perfection of surgery, gynecology, obstetrics and dentistry, the new science of infant welfare and the revival of Greek athletics. The Greeks and the Romans knew nothing of infection but believed in the healing power of Nature, hence attacked communicable diseases from within by strengthening the body (gymnastics, military training). The Jews, who had a clear notion of infection, attacked the evil from without (segregation in leprosy, diphtheria, gonorrhœa, Mosaic incineration of fomites). The development of these two lines of action is mainly responsible for the vast numbers of sound, healthy and athletic people now seen in civilized countries. At the time when Lemuel Shattuck drafted his famous report on the sanitary con-

[4] *Crimen quos inquinat æquat.*

dition of Massachusetts (1850), there were vast numbers of people in the United States who had no health whatever.[5] The people who grin and show their teeth at us in the illustrated supplements of the Sunday newspapers seem like Wilkie Collins' muscular Christians, "too unhealthily conscious of their unconscious healthiness." But the starting point of medicine and hygiene is expressed in the old aphorism of Herophilus, that there is nothing so completely disastrous to an individual as to lose his health. From this angle, let us consider, not too curiously, the brighter side of the past history of our profession, as conveyed in the personal aspirations of great physicians and the more appreciative utterances of great persons about the science and art of medicine. Collected over many years, the following are arranged with references to *manière de voir* rather than to chronologic sequence:

The Answer

Last year, I was afflicted with a grave illness and at death's door. I called in a physician. I can express my thanks for his care and zeal to heal only through your gracious coöperation: I request that he be admitted to the rights of Roman citizenship. Pliny the Younger to Trajan, x, 4.

There is something in sickness that breaks down the pride of manhood. Charles Dickens.

As long as a man is sick and wants to live, he will employ physicians and abuse them. La Bruyère.

Although we jeer
In health, when ill, we call them to attend us,
Without the least propensity to sneer. Lord Byron.

I only take money from sick people. Bretonneau to a hypochondriac.

Every man's disease is his personal property. Alonzo Clark.

I travel through life like a courier, with no place to lay my head, no leisure left to take in the great spectacle of the world and enjoy it. I get into my carriage every morning and leave it in the evening. Maximilian Stoll.

My patients are mostly among the poor, while I went to the country to see my sick children, half a day upwards of fifty knocks at my door, yet

[5] See, in particular, the admirable study of Gjerset and Hektoen on the desperate plight of Norwegian immigrants into Wisconsin before the arrival of a *bona fide* doctor of medicine from Oslo. *Norweg.-Amer. Histor. Assoc. Stud. & Rec.*, Minneapolis, 1926, I, 1-59.

through all this I am favored with calmness. My lot seems to be cast among misery and death. Griffiths, 1800.

At one time, but three physicians were able to do duty outside of their own houses. From this cruel summer until 1806, no year left us free of the fever, but the worst of it fell upon us in 1798. Benjamin Rush.

Through all of these sad years, we find always ready, always dutiful the best of the men whose lives I have sketched. Scarce one escaped the wounds of disease and at least six died, but none failed us. Surely, this is a record to look back upon with that pride which nourisheth good example. Weir Mitchell of the epidemic of 1798-1806.

My constant routine work in daily practice for sixty years has kept me in solitude, away from the good and great men, ever away from music and literature, and away from those who called me friend. Abraham Jacobi.

The little good I have done is that which has cost me the greatest trouble and has encountered the most numerous obstacles. William Hunter.

My lectures were highly esteemed, but I am of opinion my operations rather kept down my practice. Sir Astley Cooper.

My own success depended upon my zeal and industry, but for this I take no credit, as it was given to me from above. Sir Astley Cooper.

I said in my heart: in this corner you are going to learn or die. Felix Platter.

Rudolphi was no less great as a man than as a scholar—*integer vitae scelerisque purus.* Any one who knew him was bound to love and respect him, and even though his frankness of speech might sometimes hurt a little, one could not long resist his charm. What above everything else he demanded of people was righteousness, honesty of mind and freedom from all unworthy motives . . . In any ignoble mood, I should avoid looking at the portrait of my fatherly counsellor, and it is when I recall the noblest experiences of my life that I think at once of Rudolphi. Johannes Müller.

It reëchoes in my soul like a theme from Beethoven, Schubert or Brahms. Theodor Billroth on the above.

Physicians are better to-day and heal diseases better than in the days of Hippocrates and Galen. Fortunato Fedeli.

Because the newer methods of treatment are good, it does not follow that the old ones were bad: for if our honorable and worshipful ancestors had not recovered from their ailments, you and I would not be here to-day. Confucius.

In medicine, sins of commission are mortal, sins of omission venial. Tronchin.

Medicine is as old as the human race, as old as the necessity for the removal of diseases. Heinrich Haeser.

The methods of quackery are merely a theft from the most ancient phases of folk-medicine. Sudhoff.

Science is the topography of ignorance. O. W. Holmes.

But like a man walking alone in the darkness, I resolved to proceed so slowly and with such circumspection that, even if I did not get very far, I was certain not to fall. Descartes (*Discours de la Méthode,* II).

Medicine absorbs the physician's whole being because it is concerned with the entire human organism. Goethe.

The education of most people ends upon graduation; that of the physician means a lifetime of incessant study. Marx.

To support and help others on occasion is every one's whim. It is the chief end of the doctor's existence. Marx.

Almost every one who goes to bed counts upon a full night's rest: Like a picket at the outposts, the doctor must be ever on call. Marx.

He, who has no notion of the inconceivable wealth of proven experience and helpful wisdom which is in medicine, may censure it as fragmentary, under the delusion of extenuating his own ignorance. Marx.

For thousands of years, medicine has united the aims and aspirations of the best and noblest of mankind. To depreciate its treasures is to discount all human endeavour and achievement at naught. Marx.

In the records of no other profession is there to be found so large a number of men who have combined intellectual preëminence with nobility of character. Osler.

In all periods, science has been advanced by individuals, never by the spirit of the age. The spirit of the age condemned Socrates to hemlock and burned Huss. Vaugenargues.

There are centuries in which public opinion is the most imbecile of all opinions. Chamfort.

Even in populous districts, the practice of medicine is a lonely road which winds uphill all the way, and a man may easily go astray and never reach the Delectable Mountains, unless he early finds those shepherd guides of whom Bunyan tells, Knowledge, Experience, Watchful and Sincere. Osler.

It was a magnificent moonlight evening and sitting up in the fifth story, I looked down on the city and tops of the trees and of course was sad. J. S. Billings.

I thought that all was right in the system of the universe—that consistent with our desires and passions was the shortness of our life and our being liable to suffering and disease—that without this we should have been inanimate, cold and heartless creatures. Sir Charles Bell.

Medicine was once the intellectual home in which I grew up, and even the emigrant best understands and is best understood by his native land. Helmholtz.

All knowledge attains its ethical value and its human significance only by the humane sense in which it is employed. Only a good man can be a great physician. Nothnagel.

A skillful physician can revive the springtime of life. Chinese Proverb.

Medicine is a sacred calling and he who make it rediculous is guilty of sacrilege. Sudhoff.

If there is any possible means of increasing the common wisdom and ability of mankind, it is to be sought in medicine. Descartes (*Discours de la Méthode,* II).

Certainly physicians cannot prolong our lives by a single day: We live as long as God wills; but it makes a great difference whether we live miserably, like poor dogs, or keep well and fresh, and here a wise physician can do much for us. Goethe.

When I was young, patients were afraid of me; now that I am old, I am afraid of patients. Johann Peter Frank.

When controversy bursts forth, the first one to become silent is assuredly of good family. Talmud.

To connect accurate and faithful observations after death with symptoms displayed during life must be in some degree to forward the opportunities of our noble art. Richard Bright.

The poet is grieved by the indifference of his contemporaries, but the physician seems to be made philosophical by the steadying influence of every-day work, so that not Marcus Aurelius could have been more content than Auenbrugger, whilst a half-century passed by neglectful, and would not see the more than royal gift he offered to mankind. I am glad to think he was happy and to know that for all of us, as for him, this incessant everyday work is a talisman of content. Weir Mitchell.

So much of aspiration, of social ostracism endured, of obloquy repelled, of inestimable service rendered *gratis* to the poor, of incessant study, of intensive thought,

> "Of labor that in lasting fruit outgrows,
> Far noisier schemes, accomplished in repose"—

all these and more have gone to the simple proposition which Trousseau regarded as the chief aim of medicine, namely: "Get that patient well."

F. H. Garrison

ADDRESS OF THE RETIRING PRESIDENT

THE ACADEMY AS AN EDUCATIONAL INSTITUTION *

SAMUEL W. LAMBERT

It is my duty to report on the activities of the Academy of Medicine for the past two years during which it has been my privilege to serve as your President. I wish at this time to emphasize the influence of the Academy on medical education in New York. The Academy of Medicine has developed during the eighty years of its existence from a small medical club of local interest to the physicians of New York as a means of mutual conference and consultation concerning the science and art of medicine, into an educational institution of ever increasing influence over a constantly widening area.

In fostering the education of physicians of all ages the Academy has never taken part in the training of undergraduate students. Nor has it ever been a school for the intensive teaching of graduates and it never will be. The lectures presented at its stated meetings, the clinical demonstrations given by its twelve sections are open to the general medical public and to any others who may be interested. No fees and no tickets of admission are required. All the public work of the Academy is directed through two principal Committees, one on Public Health Relations and the second on Medical Education. Both Committees are essentially educational in their interests and work.

One of the least evident but most useful forms of activity is found in the Bureau of Clinical Information which keeps a daily bulletin of operations and clinics in a prominent position near the entrance of the Academy building. Some hundred operations in seventy-five hospitals are posted daily. In addition the Committee investigates all courses and clinics offered to graduates and

* Delivered before The New York Academy of Medicine, Annual Meeting, January 3, 1929.

gives its endorsement to those proven to be well-organized with adequate clinical material and equipment and conducted by clinicians and qualified teachers of known ability. Seven hundred and thirty-five visitors from out of town including one hundred and seventy-seven from thirty-five foreign countries registered in this bureau during the year.

The third course of practical lectures is being given weekly with an average attendance of 150 practitioners. The Bulletin of the Academy is published monthly in an edition of 2000 and presents in full the prominent papers read before the Academy and a resumé of the shorter communications of practical clinical value.

A closer relationship between the Academy and the Harvey Society has been brought about and the Harvey lectures will replace some of the stated meetings to the end that a greater scientific interest will be cultivated in all the proceedings of the Academy.

The Academy has accepted the responsibility of awarding at such intervals as it may determine a medal to be known as the Academy Medal. The conditions of the gift of a die and of an endowment fund to support the proposal as laid down by the donor, Dr. Samuel McCullagh, are broad and leave all detail to be decided from time to time by the Council. The award of the medal is to commemorate Distinguished Service in Medicine. Such an endowment by which prominent achievement by medical men shall be recognized and accentuated in a public manner by this scientific association of physicians cannot fail to prove to be a stimulus to work and study for the whole profession.

It was a privilege for this Academy to present on this platform the presiding judge of the Court of Appeals of New York State on the occasion of the Anniversary Discourse last November. In speaking to his chosen subject, "What Medicine can do for Law," Judge Cardozo reached a plane of thought which held his audience of lawyers,

physicians and laymen in strict attention while he developed the interrelation of law and medicine in the problems of crime, insanity and the deeper causes of irregular behavior in more careful detail than is usually evident in the routine either of hospitals, courts or correctional institutions. The address will soon be published in an appropriate form and given a wider public consideration than was possible in this assembly hall.

A new departure in the education of the profession was inaugurated this past fall when the Academy devoted the first two weeks of October to an intensive presentation of the subject "The Problems of Old Age." Daily lectures were given in the late afternoon and evening, and clinics were held at many hospitals in the morning and early afternoon hours. The attendance, as with all the functions of the Academy, was open to the public and the profession and without fee or admission ticket. It is felt by the Council that the experiment was a success and it will be repeated next fall when the subject of "Functional and Nervous Problems in Medicine and Surgery" will be presented in a similar thorough manner.

Another new relation has been created and the County Medical Society has joined with the Academy to create a Medical Information Bureau which is designed to give quickly to the public press reliable statements concerning new discoveries and medical problems which may arise in such daily occurrences as have the peculiar character of "news." Both the organized society of the county and the Academy hope that the natural development of this bureau will result in the publication in the newspapers of more trustworthy news of a medical nature than has sometimes been the fact in the past.

About half of the cubic contents of this building is occupied by the Library of the Academy. The Library contains some 300,000 books and pamphlets and is the chief factor in promoting education by the Academy. There is no other public medical library in Manhattan. A very excellent library is maintained by the Medical Society of

Kings County and the medical schools and several hospitals also have smaller reference libraries for the use of members, students and professional staffs. The great Public Library of the City at 42nd Street and Fifth Avenue does not maintain a division of medical literature. The Academy appreciates its duty to the public as the owner of its collection of books and has extended the number of hours for attendance by the general public. It still reserves the evening hours for its Fellows and associate members. It is my opinion that this slight restriction of time for outside readers should be completely abolished.

It has been frequently said that old medical books are of no value except as waste paper. The Academy cannot endorse this view and its librarian is an enthusiastic collector of books of historical interest in tracing the growth and development of medical science. During the past year the notable collection of such books collected by Dr. Edward Streeter of Boston came into the market and the Academy, through the gifts of many friends and its own Fellows, was fortunate to secure the entire lot. This has added much to the historical value of the Academy's Library. An exhibition of medical incunabula is now on view in the Library and presents a very accurate survey of what the oldest medical books mean and represent. One of the happy results of the collection of the funds for this purchase was the formation of a separate endowment the income of which is to be devoted to the purchase of similar books of rarity and interest. This rare book fund amounts to over $17,000 at the present time and it shall be my special endeavor to see it grow in the future.

It is my pleasure to express to you my appreciation of the honor you have done me in electing me to this office and to thank you for your confidence and coöperation. I assure you that your Academy has still before it an even greater future than its past. It is with great confidence and enthusiasm in that future that I turn over the duties of the office to my elected successor, Dr. John A. Hartwell.

ADDRESS OF THE INCOMING PRESIDENT

THE ACADEMY, THE PROFESSION AND THE PUBLIC *

JOHN A. HARTWELL

DR. LAMBERT, FELLOWS AND GUESTS OF THE ACADEMY:

The men who founded The New York Academy of Medicine in 1847 had unusual vision as to the value of such an institution to the profession and to society. In the years following, men eminently fitted to carry out this vision were called to its leadership and, therefore, one who has received the honor of becoming your President, is keenly alive to his limitations and to the responsibilities which accompany that honor. That you have seen fit to entrust the Presidency to me, gives me courage to believe that your support is assured. In this belief I undertake my duties with the hope of continued success; and it is with such hope that I express to you my deep appreciation of your confidence. The inaugural and valedictory addresses of such men as John Francis, Valentine Mott and Samuel Purple, give to their successors an abiding faith in the ideals and standards of our Academy. Through all that these men say, there runs a thread of earnestness which is as inspiring to us, as it was to the Fellows of nearly a century ago; and the growth of the Academy from its modest beginning, in the Lyceum of Natural History, to its present commanding position, is directly traceable to the inspiration given it in those early days by these Masters.

The Academy has always endeavored to foster those relations between the profession and the public which will most surely fulfill the needs of the latter in all that pertains to its health. The first object as expressed in the original constitution was "The Separation of the Regular from the Irregular Practitioners." The early presidents voiced in no measured terms the menace to the people.

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which they conceived as existing in the practices of the latter. While the acute situation which made such a declaration necessary at that time no longer exists, the problem in a modified form, is still before us. Irregular practitioners whose practices are founded on misconception are sanctioned by law, and it is no less essential today than it was when our constitution was first written, that this menace should be removed. Repeatedly we have coöperated with other organizations in an attempt to prevent unqualified practice from being legalized, but not always successfully. The public, seeking relief from ill health, is not quick to differentiate accurately between those practitioners who have labored for a sound basis of education, and those who claim peculiar curative ability without such education. The fact that the latter are in many cases able to establish their claims and give the relief sought, adds a difficulty to the problem. Opposition to such practitioners by the regular profession is not infrequently ascribed to an ulterior motive, and a portion of the public is convinced that the unqualified, whether they be science healers, osteopaths or chiropractors, are to be ranked with the qualified members of our calling. The remedy for the evil lies in making the stand of our profession fully comprehended. The platform on which we unanimously are agreed is so simple that it ought to be easily understood. The Academy voices this platform, namely, that the method of therapeusis to be employed in any case rests with the practitioner employing it provided that practitioner has qualified for this responsibility by those educational reequirements which we demand from ourselves.

The public must be made to comprehend this simple formula and this can only be brought about by definite effort. We ought not to stand by in an unconcerned attitude while any portion of the community rests its faith in health matters on the teaching of ignorance. That an intelligent individual who has confidence in, and admiration for, a highly trained physician often places himself in the care of a man whose knowledge of the human body is prac-

tically non-existent, argues a fundamental lack of understanding. The success of the unqualified lies almost wholly on the acceptance of the *post hoc propter hoc* fallacy of reasoning. Because a chiropractor by manipulation relieves a pain, is no reason to believe that he is competent to be one's advisor as to when such manipulations are needed, or that he is a safe counsel on matters of health. Again, because a mental or science healer brings comfort to a patient suffering from acute or chronic disease is no evidence that such a healer is competent either to diagnose or give efficient treatment to that disease. On the other hand, the medical profession cannot neglect to utilize what is valuable in both physiotherapy and mental hygiene; two fields of therapeusis which have not received the attention to which they are entitled. Every patient who seeks treatment from unqualified practitioners represents, to some extent, our failure and thus it is doubly incumbent that we leave nothing undone to raise our own practices to the highest efficiency.

No physician in this community is without the means of keeping fully abreast of the times, if he avail himself of the post-graduate privileges which the Academy either gives in itself, or puts at his disposal. An analysis of the subject matter of the papers which have been presented before the Academy and the sections during the past five years shows a remarkably balanced relation between clinical, laboratory and research problems and these alone make an impressive course of graduate study. In addition the Committee on Medical Education gives its approval to post-graduate courses throughout the city which cover all branches. Thus we are discharging the intentions of the founders more fully each year and in this we cannot do better than to follow the precepts of those who have built up its traditions. The following quotation from Dr. Francis is not without present value:

"It is most remarkably the case in our science, that however brilliant may have been the imaginations of those who have endeavored to promote the Hippocratic art, none

seem to have secured a perpetuity of fame who have not most scrupulously adhered to the inductive system of philosophy, first adopted by Hippocrates himself, afterwards enforced with all the rhetoric and amplitude of truth by Lord Verulam and exemplified in the writings of Sydenham, Boerhaave, Haller, Huxham, Rush and other distinguished ornaments in our profession. The disastrous issues which have marked crude and untenable theories in all ages must perpetually admonish us that on facts alone can our science be erected: and he alone is to be deemed the benefactor of our art who wisely makes use of a cautious experience."

These old-fashioned truths, clearly expressing the spirit of those who gave the initial impetus to the Academy, were spoken by Dr. Francis on February 2, 1848 when he was inducted into office as its second President and are certainly as applicable to-day as then. The rapid advances in the biological sciences have placed at the disposal of the physician many means of combating disease which rest on infinitely complex principles. The temptation to utilize these means without sound reasoning and the use of a cautious experience, if yielded to, can only lead to disastrous issues. Unless we can create an atmosphere for our profession which precludes crude and untenable theories from being the basis of incompetent practice, we fail by that much in the ideal before us. It is the duty of this body to allow no such to emanate from the Academy without challenge.

Fifty years later, at the Semi-Centennial, our own greatly beloved contemporary, Dr. Jacobi, opened a vista of usefulness when he said, "The time will soon come when the culture of a nation will be estimated according to the mutual relations of medicine and the people. Is this an ideal? It is, but no Utopia. Indeed, much of what was an ideal twenty-five years ago has been achieved. It is probably true, however, that no ideal ever will meet with its entire consummation, and ideals will be modified and expanded. Nor do I believe that even the star guiding

the three Sages of the East shone always with equal splendor. Thus it is possible that what I earnestly hope for in the next half century will not be completely fulfilled; but woe to the man, to the profession, to the nation, without an ideal as a guiding star.

"To medicine in its legitimate and just meaning, that star is the improvement of man both individually and collectively. It demands the combination of scientific research into the wants of mankind, with the application of preventives and remedies for its physical, intellectual and moral dangers and defects. To keep and fortify medicine on that platform is the ideal of our calling. By working for it, medicine and medical men may create that power which alone protects individuals against hebetude or despair, and nations against wreck and perdition. That power is benevolence, beneficence and mutual assistance."

This prophesy concerning the mutual relations of medicine and the people has proved no Utopia by any means in the three decades since Dr. Jacobi made it. More and more is the value of medicine to the public being understood: The building of the Panama canal, the world-wide control of malaria, yellow fever and cholera; the immunization against typhoid fever, the splendid lessening of the ravages of tuberculosis, the remarkable decrease in infant mortality, the economical advantages of healthful environment for our workers and the safeguarding of those who carry on our great industries are a direct fulfillment of Dr. Jacobi's vision.

The Academy of Medicine is faced with the problem of advancing this work, and on each of its Fellows lies his share of more accurately interpreting for the public, the science and art of medicine. With the acquisition of this building the Academy has taken on an added degree of importance and dignity which has greatly enhanced its opportunity to influence the community in all that pertains to Public Health, Preventive Medicine and Medical Education. A pioneer in all these fields, there now rests upon the legatees of the Founders a responsibility to seize

this opportunity and carry forward to completion the structure laid on such a broad foundation.

Our profession in this country has forged ahead marvelously in the past twenty-five years in the standards and efficiency of our education of medical students and medical graduates. Much has been accomplished in eliminating weaker schools and strengthening stronger schools. Honesty, however, requires the acknowledgment that the impetus for much of this improvement has come from without. The profession has responded wholeheartedly and enthusiastically to this impetus, as if it had consciously awaited this influence to rouse itself from its lethargy. But the time has arrived when we must recognize that it is necessary to keep in the lead of the various activities which spell "the mutual relations of medicine and the people," unless we are willing to accept the teaching of that light-hearted philosopher, Bernard Shaw, which he recently re-enunciated; that the practice of medicine should be controlled by the patients rather than by the doctors. A definite program should be inaugurated whereby our medical institutions shall undertake this education of the public. The Academy of Medicine might well take the lead in such education. Already we have a few lectures to which the public is invited, but there are so many points at which medical activities come into intimate contact with the community at large, that a much more comprehensive program of live interest could easily be laid down. So far as I am aware, medicine stands alone in being overlooked in the courses of public lectures which are given in this city by many organizations. The church, the law, the cultural arts, history, literature, travel and adventure, are expounded to audiences totaling a vast number. Medicine, in which every individual has a personal and vital stake, receives scant attention.

A second object of the Academy was expressed in the original constitution as "The promotion of the character, interests and honor of the fraternity by maintaining the union and harmony of the regular profession of the city

and its vicinity and aiming to elevate the standard of medical education."

The character and honor of the profession are the foundation stones of the whole structure of medicine. This structure has been erected on the conviction that doctors are concerned in giving unselfish service to the public. This is our sole title to whatever of peculiar distinction we may enjoy. We are assailed on every side by the temptation to become rivals of those who worship at other altars. Particularly is this so in a large wealthy community like ours, where material advancement yields such patent rewards. Strength of character and an abiding faith in things not seen are required to guide one's footsteps along the paths that have been laid out by the great and good men of the past. One such, whom I just quoted, defines the star which leads us along that path as the "improvement of man, both individually and collectively." Unless we can find satisfaction and reward for a life of hard work and more often than not, real sacrifice, in the consciousness of striving toward such a star, we cannot hope to enjoy the high esteem that has been accorded to our leaders in the past. No brilliance of intellect, no accomplishment of mind, no accumulation of wealth has ever elevated any physician to be the respected and beloved colleague of the profession or the idolized friend of his fellow-men unless these have been associated with a devotion that places a desire to help above them all. This Academy stands as the champion of this conception of our privilege and our duty. We are called upon to uphold the highest traditions of the character and honor of our profession. How then shall we meet the harassing questions which are before us so as to reconcile our just need of material reward with the equal need of maintaining medicine on a high plane of endeavor? If we arrogate to ourselves the function of "improving mankind individually and collectively," particularly in healthfulness, we are forced to acknowledge that our fellow citizens have a right to demand that each one of them shall receive at our hands what is necessary, that he may enjoy good

health, in so far as the science and art of medicine can give it. Provision must be made for those who need this, without cost, or at a cost within their means to pay, as well as for those who are amply able to give financial return for the service rendered to them.

Medical men in this city and in the entire country are faced with these grave and important questions of economics. These questions must be solved in such a way that the health of the public and the individual is safeguarded. This must be accomplished by means that will neither deprive the physician of just compensation, nor lower the dignity and influence of his calling. It is recorded that when the question of establishing a Department of Health in this city was first broached, a not inconsiderable portion of the medical profession opposed it on the ground that it would deprive physicians of a legitimate field of activity. Wiser counsel prevailed and the more thoughtful doctors recognized the right of the public to this protection. The Academy was a prime mover in establishing this city department. But at a later time, when Hermann Biggs moved for the reporting of tuberculosis as a communicable disease, the Academy was found on the wrong side of the argument. No one at the present time would have the hardihood to argue against these things or to argue that their introduction into our life has in any way worked detrimentally to the practicing physicians. We must have it clearly in our minds that the people, largely by our efforts, have come to set the highest value on health. They have learned through the ages that this is an essential asset in any undertaking. Moreover, they know that the Science of Medicine is capable of accomplishing definite results toward giving them this asset and, finally, they look to us to translate this science into practice. Their need is such that they will strive for this service without any serious consideration concerning the economic principles involved. It is in answer to this urge that the profession and laity interested in these problems, have brought about the enormous growth and use of hospitals and out-patient departments in recent years. These

institutions primarily came into existence for the care of the indigent only. It gradually developed that the hospitals were equally fitted to give service to those who could afford to pay for it, and that in many respects, this service could be given more effectively than at home, or in the doctor's office.

From this grew the common knowledge that the poor and the rich were much better situated to receive adequate care than that great class of self-supporting persons of small margin of income. In recent years both the hospitals and out-patient clinics have been giving serious thought to the needs of this class. Semi-private rooms and wards, where a reduced charge is made to bed patients, both for accommodation and professional service, help to solve the problem for this group, and part pay or full pay clinics for the ambulatory group.

Very recently the growth in these latter clinics has been rapid and some concern is expressed that there lies herein a danger to the economic status of the practicing physician. A portion of the profession senses a distinct menace and this portion is organizing to impose a definite limitation to these activities. Such are demanding that pay clinics be abolished, and that hospitals throw their wards and rooms open to all qualified physicians for some part, greater or less, in the treatment of patients who pass from their care to that of the hospital. Opposed to this group are those who have had an active part in bringing about these developments and who see in them a definite step forward in fulfilling the responsibility, if not the obligation, which rests upon us. The problem will not be solved by the argument that the earning capacity of doctors will be lessened by these undertakings. Patients seek treatment in these institutions because their experience makes them believe they can secure better care in them than can be secured in the private offices which are at their disposal. We must realize that the average prospective patient has no means of knowing where he may find adequate treatment within his ability to pay for it. He is not in-

formed as to the relative merits of different doctors and until we can accept as a premise that he will necessarily fall under the care of a careful and competent physician, we must feel sympathy with those who seek relief from an institution operated, in most instances, by a carefully selected personnel.

Applicants give it as a common reason for seeking treatment in one of these institutions where careful records are kept, that they have failed to find relief in one or more private offices. Other things being equal, the public prefers the service of a private doctor to that of a clinic, and the latter may well act as a stimulus to the former to do his utmost for his patient. But we cannot fail to recognize that such institutions are capable of organization along lines that give them advantages over the individual in the matter of complex study and methods of therapy. If, therefore, these newer developments are able to meet a just demand in the most efficient manner, the public will seek them the more insistently. Unless we provide them voluntarily, they will be forced upon us, because we cannot defend the position that any group shall be deprived of the best service which can be furnished, so long as we stand on the platform that we are responsible for the health of the community.

Our problem lies in finding a means whereby these aids shall not constitute an unfair discrimination against the profession at large and thus ultimately operate to the disadvantage of the public, since it must be accepted as a truth that anything which is inimical to the medical profession, in the end will be inimical to public interest. The answer then, does not lie in restriction or prohibition, but in regulation which will fulfill our duty of service and enlarge our usefulness without endangering our rights or our influence. It is my belief that self supporting clinics, medical centers and hospitals with self contained medical staffs may be so organized that they will prove to be of definite advantage to the entire profession, and in no wise unfair competitors.

Already our Committee on Public Health Relations has given serious thought to the "open hospital" question and a report of their findings with recommendations, to which I ask your careful consideration, will appear in the Bulletin. It is not proper at this time that I should formulate for the Academy any policy which will take what is good and eliminate what is bad in these newer trends. This can be arrived at only after careful study of the principles involved. But it is entirely proper that I urge upon the Academy and the Fellows, as individuals, that every effort be made to understand these principles and to help solve the problems in accordance with the high ideals of our profession and the needs of the people. This certainly is a function of the Academy by virtue of its position in the city and the country.

Other matters calling for thoughtful consideration pertain to the mutual relations between the general practitioner and the specialist (including the surgeon) and between them and the patient. The practice of medicine has become of such complexity that the general practitioner is required to call upon the specialist for many services that formerly he accomplished himself. Special knowledge and special training in all fields of activity command a higher compensation than the unspecialized, and thus the cost of medical care to the patient is steadily increasing. This has been an important factor in the development of group practice and of the highly organized self-supporting clinics already mentioned. The general practitioner is an essential link in the work of the specialist. He determines to a large measure, oftentimes after exhaustive study, that the latter is needed. He selects the individual specialist to carry out the necessary procedure. The doctor's compensation for this preliminary study and advice is in most cases small in comparison to that of the specialist whose service is often of short duration. To offset what is looked upon as an unjust discrimination, the wholly evil practice of fee-splitting has grown to alarming proportions. In essence, this amounts to the family doctor receiving a rebate from the specialist for a service for which

he is charging a separate fee, without the patient knowing that such a rebate is being paid. It results in two evils: First, the selection by the family physician of a specialist who will pay the rebate, which may readily lead to employing a less qualified man than would otherwise be obtained, and, second, an increased charge by the specialist in order to cover the unacknowledged rebate. It is a secret understanding between two professional men which they dare not bring into the open. No right-minded man can justify this, and disaster, if not disgrace, threatens the profession if it be tolerated. It is quite beside the mark to say that the family doctor is underpaid and the specialist overpaid. The correction for this, if it exist, lies in a readjustment between the two with the patient having full knowledge as to what he is paying each and for what service. Again, I am not in a position to commit the Academy to any policy in meeting this condition, but it is entirely proper that I should ask your very serious consideration of the problem with a view to a solution that will establish a just relation within the profession and between it and the public.

Your retiring President has presented to you the accomplishments of the two years of his administration. It is a record in which we may justly feel a pride and for which we tender to him our sincere congratulations. To carry on in an equally efficient manner will tax our utmost efforts. Under Dr. Lambert the various departments have shown continued enlargement of their sphere of action and have solved many of the problems coming before them. I have asked the executive heads of these departments to briefly outline matters that need consideration and action in the near future. Time will not permit that these be given in detail. They all tend toward an increase in our expenditure and Dr. Williams informs us that for the first time in five years the requests for budgetary allowances are in excess of our anticipated income.

The great effort that has been put forth in the recent past to finance the truly astounding expansion which has

taken place, has shown of what the Fellows are capable. The Academy has now risen to a position of commanding importance in the city, the state and the country. It ranks with other great undertakings which touch the lives of our people. It lies with us to continue to present its needs in such quarters and in such terms as will be translated into ways and means of carrying forward its functions. It lies with us to demonstrate that these functions, properly carried forward, are of a value to the community commensurate with the cost. I therefore earnestly appeal to you once more to take a part in this presentation, and interest those who have the means to come to our continued support. The proper housing of our incunabula and other treasures of the library, possibly in the current journal room which must then find new quarters; and the introduction of research workers in the Library, and the fields of public health and education, are among the projects that must receive consideration. Our Library has all the facilities for instruction of students and the profession, in the uses of books and for training librarians for other institutions. The personnel to carry on this work must be provided.

This country is entirely lacking in schools of forensic medicine. The National Research Council has discussed this need with our Committees on Public Health Relations and Medical Education. These in turn have given thought and effort to an inauguration of the idea, which will be continued next year. Additional personnel will be required to bring this matter before municipal and state officials, so they will see the need of trained men in this field and before educators so that such men may be available when the call comes. As Dr. Foster, the Chairman, expresses it, "Two ends are to be achieved simultaneously."

The value of a medical museum, with a library of lantern slides, x-ray films, educational charts and other aids to dissemination of knowledge should develop into a most valuable contribution to our influence on education. From

time to time your officers will take occasion to discuss these undertakings more specifically, but they are called to your attention now, in order that you may give thought to our needs and formulate means of meeting them.

I leave for your consideration this theme:

The Academy of Medicine, founded nearly a century ago, was created to meet very definite needs of the profession and the community, by a group of far-seeing men who builded the foundation so well that a structure of truly beautiful proportions has arisen. This structure is our heritage and we may enjoy our privileges only if we take, with them, a full sense of our obligations. The Academy is more than a collection of books and an educational forum, invaluable as these are. It possesses traditions of rare fineness, the growth of the spiritual influence given to it by generations of noble men; these it dedicates to the service of the people. We are called upon to keep these traditions unsullied and to be guided in our actions by a reverence for that which is noble in the "character, interests and honor of our fraternity" and for that which endows us with the "power of benevolence, beneficence and mutual assistance."

In accepting the great honor of being asked to become your leader in this dedication and in this reverence I earnestly voice the hope that the limited qualifications which are mine will be stimulated to the utmost by your example, and that together we may not falter in the high undertaking to which we are called.

A STUDY OF THE STREPTOCOCCUS IN THE ETIOLOGY OF ARTHRITIS *

WITH

DEMONSTRATION OF ARTHRITIC LESIONS EXPERIMENTALLY PRODUCED

REGINALD BURBANK

It is scarcely pertinent to this paper to go into the older theories as to the aetiology of chronic arthritis, but it does seem of importance to state that until the year 1887, the humoral and neural theories of causation held almost undisputed sway. Mantle at that time put forward the viewpoint that rheumatic fever is an infection and that the organism, a micrococcus, obtains entry through the tonsils. He described this organism as a coccus which he claimed to have isolated from both the blood stream and from joint effusions and was able to grow outside the body. This work probably paved the way for the launching of Max Schuller's microbial theory of the causation of chronic arthritis in 1892, basing his contention on the fact that he had discovered micro-organisms in the synovial fluid of chronically diseased joints. Further research along these lines has given us a mass of rather conflicting data with each investigator assigning some particular bacterium as causative agent.

The majority of the arthritic lesions, experimentally produced in animals when strains isolated from human cultures have been used, are rather misleading, as the lesions produced have been almost without exception acute ones and the joints have been of the purulent type instead of the chronic, indolent, progressive involvement so characteristic of arthritis in the human. The work of Triboulet, Coyen, Wassermann, Beaton and Walker, Ryffel, Lewis and Longcope, Poynton and Paine, and Rosenow did a great deal, however, toward establishing the infective theory of acute rheumatic joint involvement and

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naturally led to extended investigation of the same causative agents in chronic arthritis.

T. W. Hastings, some sixteen years ago, employed the old Wassermann technique in testing the blood of chronic arthritics for antibodies against streptococci and opened an important additional field for investigation from the standpoint of bacterial aetiology. We have elaborated on this work using active serum and employing the patient's native complement, making use of many different strains for antigens instead of a single one as in the early work, and our findings convinced us that the streptococcus plays a very distinct pathogenic role in the causation of this protean disease. Many thousands of complement fixation tests led us to feel confident that whatever other factors might be involved in the production of arthritis, the streptococcus was practically a *sine qua non* of the disease.

Since the presence of immune bodies presupposes the presence of an active infective focus draining, from time to time, into the general circulation, we sought to prove the culpability of the streptococcus by attempting to isolate it from the blood stream of arthritic patients and also from the joint fluids of chronic cases.

Routine blood cultures were made on every patient examined but the investigation was for a long time a fruitless one and would have been utterly discouraging had it not been for the fact that freshly taken hanging drop examination of blood under the microscope sometimes showed ill-defined diphtheroid and streptococcus-like forms similar to those observed in septicaemia patients with positive blood cultures. We felt that we were dealing with viable streptococci and that failure to grow them must be due to some inhibiting substances in the blood itself, and if a bacteriolytic action existed, it was due, at least indirectly, to the presence of alexin. The next step was to neutralize this alexin. Peptone was found to be the agent best adapted for this purpose. Gradually we adopted a technique which consists of using 10 c.c. of a sterile ten per cent peptone solution, and ten minutes to half an hour

before the blood for culture is taken, neutralizing the peptone with ½ c.c. of sterile 1 per cent sodium carbonate solution. The blood is then taken under sterile precautions, and 1 c.c. is added to the peptone-carbonate mixture, gently shaken, left for half an hour at room temperature, and then incubated.

The following morning a pour plate is prepared by gently shaking the blood-peptone mixture to give uniform distribution of cells, mixing 2 to 2½ c.c. with 2 per cent nutrient agar at a temperature of 39 to 40 degrees Centigrade, and pouring in a petri dish. After the agar has set firmly, the plate is inverted and returned to the incubator, the temperature of which should be held at 37 degrees.

Each day a new plate is poured from the blood-peptone mixture until the whole has been used. The plates are marked according to their respective dates, and are examined daily. The first or second plate is most apt to show growth when positive cultures are obtained and colonies appear anywhere from the second to the fifteenth day.

There seems to be a distinct seasonal influence on the bacteriological findings in the type of cases we are dealing with. The best season to obtain positive cultures in our experience has been the late fall and early winter months. In the latter part of October and early November the bacteria isolated usually belong to the diphtheroid-streptococcic type of micro-organisms. These organisms do not ferment any of the sugars, and if distinctly of the streptococcic morphology, are *ignavus*, according to the Holman classification. Even with a definite diphtheroid morphology further transplantation causes some of these organisms to change to definite streptococcic type, without changing their sugar fermenting properties.

In the latter part of November, all of December, and most of January, true streptococcic types appear.

The types we have isolated *from our arthritides*, during these months, fall into major groups of *faecalis* of the

green streptococci, and *infrequens* in the hemolytic. Only scattered findings of *mitis, salivarius, equinus* and *subacidus* have been found.

We presume that the latter types may be due to sore throat, and allied infections occasionally giving a temporary septicaemia.

During the months of March, April and throughout the summer months, all cultures have been negative.

When we are dealing with the diphtheroid type of organisms the poured plates usually show innumerable minute non-hemolytic colonies uniformly scattered throughout the media; but streptococci when found usually show only a few colonies to a plate.

The growths obtained during the late fall and winter months, exceeded our most sanguine expectations, for contrary to previous findings when positive blood cultures of streptococci were isolated only in septicaemias with septic temperatures, pure cultures of low virulence streptococci were obtained from the blood streams of afebrile arthritics who were able to carry on their daily routine of life with no other symptoms than their swollen or painful joints.

The evidence seemed to point to the fact that we were dealing with types of streptococci, both hemolytic and viridans, quite different from those found in the febrile septicaemias. Morphologically these blood culture strains are identical with other streptococci though the chains are rather short. Biologically they grow fairly well in ordinary media once they are isolated and subcultured. They are facultative aerobes. They stain well with ordinary dyes and retain the gram stain. On solid media they grow like other streptococci in fine pin-point colonies and on blood plates certain strains give a clear cut hemolytic zone about the colony while others give a fairly large zone of methemoglobin discoloration like ordinary viridans blood cultures. In different sugar media both hemolytic and viridans types regularly ferment lactose,

mannite and salicin but may or may not ferment raffinose and inulin. In eighty per cent of our positive findings, we were able to link the hemolytic strains with *infrequens* and the viridans with *faecalis* according to the Holman classification. The remaining twenty per cent show various types according to the sugar fermenting classification.

While doing the blood culture work we were able to obtain positive cultures from aspirated joint fluids in several chronic arthritic cases and the same sugar fermenting properties were found in these cultures as in the majority of the blood culture strains.

For a number of years bacterial examination of the stool and culture of pathogenic organisms found therein has been an office routine for every patient. Many of these cases had no apparent foci of infection remaining. Stool cultures were made routinely by inoculating one tube containing 10 c.c. of a one per cent sodium carbonate solution with one platinum loopful of stool and incubating over night.

The following morning a blood-agar pour plate is made by inoculating blood-agar mixture with one small loopful of the carbonate growth. This is allowed to remain in the incubator until the day following, when, in the presence of streptococci, deep pin-point colonies will be present in myriads. Sugar fermenting properties are then studied by isolation and inoculation in various sugar media.

These stool cultures gave us evidence that the majority of streptococci found in the intestinal tract came under the same sugar fermenting classification as the blood culture and joint fluid strains. It is interesting to note that well over 90 per cent of all definite arthritic cases had pathogenic streptococci in large numbers in the intestinal tract.

We felt that if it were possible to inject our blood culture organisms into animals and produce lesions similar

to those originally found in the human from whom they were isolated, a long step had been taken in inculpating streptococci as definite factors in the causation of chronic arthritis. As direct evidence we inoculated various animals, including guinea-pigs, mice and rabbits, with blood culture strains akin to the *infrequens* and *faecalis*. The results with guinea-pigs and mice were negative as far as joint involvement was concerned, but in due course of time chronic arthritic changes began to appear in the inoculated rabbits. The early experimental work along this line has already been published in the April, 1927, number of the *Journal of Bone and Joint Surgery,* but since then we have continued the experiments with an extended series of rabbits where the strain from the human blood culture has been injected into the rabbit reproducing the disease in all its chronicity without showing either pus formation or acute suppuration in the joints. The injected organism has then been isolated from the arthritic rabbit; repassed to another rabbit; similar symptoms produced, isolated again, repassed to another, and so on, reproducing chronic arthritis at will and fulfilling the requirements of Koch's postulates.

The method of inoculation employed is to take 1 c.c. of a twenty-four hour growth of the hemolytic *infrequens* and inject intravenously, one injection usually being sufficient to produce evidence of beginning joint involvement in a few weeks' time.

With the *faecalis* the initial injection is given as with the *infrequens* but subsequent injections, every second day, are given in saline suspension for four or five doses to avoid the toxic effects of the repeated use of broth. The necessity for repeated injections would indicate that the *faecalis* is the less virulent organism.

The symptomatology of the inoculated animals is, *first,* a two or three day septicaemia during which the inoculated organism can be isolated from the animal's blood stream by culture.

Then there seems to be a localization according to the selective property of the organism, the wrist joints being most frequently affected; this localization may take anywhere from a few days to a month.

The severely afflicted animals have a tendency to lose weight despite the fact that they eat normally and do not appear to be affected physically except by the joint manifestations.

The animals protect the involved joints by holding them up to prevent weight bearing.

Objective signs of swelling gradually appear and tenderness is evident, for if the animal is frightened and moves suddenly, it emits piteous little cries which are not uttered if slow movement is made as the joints seem then to be protected by muscle spasm.

Fig. 1.—Rabbit B. Normal control upper extremity.

The x-ray gives direct evidence of the exudative, atrophic or productive changes that are going on, and in certain animals, destructive, productive and exudative changes can be shown in the same joint.

Microscopical studies of sections from autopsied animals show exudative changes, decalcification, proliferation and destruction of cartilage. Some animals have joints with the epiphyses showing changes analagous to those of rickets. Decalcification and recalcification of the bone may be co-existant. There may also be fibrous tissue formation sufficient to give a fibrous ankylosis. Muscular degeneration and atrophy is frequently marked and simi-

Fig. 2.—Rabbit No. 6. Acute exudative-atrophic wrist joint with ulnar deviation.

lar to aniso-atrophic or deforming arthritis in the human. The extreme deformity produced, similar to that found in the human, coupled with aniso-atrophic muscular involvement, seems to be a direct toxic action on the muscles.

The streptococci may be seen in the Haversian canals and canaliculi and may also be cultured from the bony scrapings.

Autopsy findings on certain rabbits show exudate in the serous sacs with occasional involvement of the peritoneum, pericardium and pleura. There may be a generalized oedema-like denseness of the skeletal musculature and

Fig. 3.—Rabbit No. 9. Acute exudative productive lesion of the right elbow joint.

subcutaneous tissues, possibly due to salt imbalance and kidney involvement. The joints involved show exudation, with some capsular thickening. The muscle fibres frequently show small hemorrhages probably akin to myalgic nodules in the human. There may be pathology of the heart, liver and kidneys. Scrapings of the joint surfaces on culture give organisms identical with the ones injected.

Fig. 4.—Rabbit 6. Acute exudative atrophic wrist joint. Atrophic changes very marked around the epiphysial cartilages.

These streptococci on injection produce septicaemia, indolent joint symptoms similar to those found in the human, muscle weakness and sometimes diarrhœa and corneal opacities similar to iritis. They can be recovered from the autopsied rabbit, reinjected into the vein of a normal one, and again produce a similar succession of symptoms with recovery of the same type of streptococcus at autopsy.

Having tested the uniformity of the blood culture strains in producing such symptoms in a series of twelve rabbits, we again decided to try the same experiment with individual focal strains. These focal strain inoculations were uniformly unsuccessful in producing anything but fatal septicaemias, definitely purulent joints or no symptoms

Fig. 5.—Rabbit No. 1. Generalized chronic atrophic deformans arthritis, upper extremity.

whatsoever until we used *faecalis* and *infrequens* strains isolated from stool cultures of chronic arthritics. Such cultures produced the same indolent joint pathology observed after the blood culture inoculations but the onset of the symptoms was slower.

We are somewhat at a loss to account for so frequently finding the *faecalis* and *infrequens* in both blood and stool cultures when the two organisms are so rarely found in foci of infection such as teeth and tonsils. The only reasonable explanation seems to be that the streptococcus is able to adapt its sugar fermenting properties to its environment, thus permitting a focal infection to give a secondary implant that adapts itself to growth under changed conditions in the intestinal tract, the joints and the blood stream itself.

Fig. 6.—Rabbit No. 1. Generalized chronic atrophic deformans arthritis, knees and ankles

Correlating our findings it would seem to be a justifiable statement that evidence would inculpate both *infrequens* and *faecalis* streptococci as at least very important causative factors in the production of chronic arthritis in the human, probably with some deficiency element also present. As these organisms are found most frequently in the intestinal tract, we feel that the intestine is one of the major portals of entry in the arthritides.

A CLINICAL INDEX OF MALIGNANCY FOR CARCINOMA OF THE BREAST *

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Broder has classified cases of cancer, with respect to the degree of malignancy, into one of four groups, based upon the histology of the tumor. His work has stimulated many others to study groups of cases in a similar manner. Greenough recently published the results of such a study in a series of cases of mammary cancer and reached the conclusion that one could predict, with reasonable accuracy, the outcome of a case, depending solely on such an histological survey. The pathological laboratory of the Memorial Hospital has included for some years, as an integral part of its report of tissue study, a grading into one of three groups indicating the degree of malignancy of the process. It seemed to us that so much emphasis has been placed upon histological findings that we have lost sight of the importance of clinical data, always available for study. Reflection upon this subject has led us to believe that cases of carcinoma of the breast may be graded from purely clinical data and furnish perhaps an even more accurate estimate of the degree of malignancy, than the histology of the tumors can reveal.

A wide variation is found in the clinical setting and course of mammary cancer, for the disease may be fatal in a few months or continue for many years, in our own experience the shortest duration being 5 months, and the longest 22½ years. A marked difference in malignancy exists between tumors of small size which have been present for years, compared to those of rapid growth, present but a few weeks or months. A more favorable prognosis should be expected when the disease is thoroughly local-

* Delivered before the Section of Surgery, November 2, 1928.

ized, as compared to the outlook when the axillary lymph nodes are extensively involved. Cancer of the breast associated with pregnancy or lactation, presents a menacing picture and usually runs a rapidly fatal course. An elderly woman, with a well-localized process, which has shown little growth activity, would be placed in the relatively benign group. A rapidly growing tumor in a young woman would be classified as highly malignant. Upon the other hand, a well encapsulated tumor of considerable size, even with beginning ulceration, but without involvement of axillary nodes is often of relatively low malignancy. All of these considerations should be taken into account, prior to treatment, in evaluating the degree of malignancy. Such an estimate of the patient's status based on clinical data, is important, for it may guide the surgeon in the matter of prognosis and determine his decision for or against operation.

Although there were many clinical factors which might be considered, it seemed to us that the four major ones to be used in estimating the degree of malignancy were:

1: Age.
2: Lactation present.
3: Rate of growth.
4: Extent of disease.

These are the weighting factors, and they alone have been considered in building up what we have chosen to call *"a clinical index of malignancy."* After due consideration, the weight which we assigned, arbitrarily, to each factor was as follows:

Age — A = 2
Lactation — L = 3
Rate of growth — R = 4
Extent of disease — E = 5

Each weighting factor was sub-divided into "Gradation Factors," in a similar manner and the following arbitrary values were assigned to each:

TABLE NO. 1 *

	Weighting Factor	Gradation Factors		
Age	A = 2	Ag	Over 55	= 1
			41 — 55	= 2
			40 or under	= 5
Lactation	L = 3	Lg	Absent	= 0
			Present	= 3
Rate of growth	R = 4	Rg	Slow	= 1
			Moderate	= 2
			Rapid	= 4
Extent of disease	E = 5	Eg	Small 3 cm. or less	= 1
			Large	= 2
			Nodes present	= 4

* We desire to express our thanks to Dr. Raymond Pearl, of the School of Hygiene, Johns Hopkins University, for his guidance and aid in the development of the index.

The clinical index of malignancy for any individual patient is calculated by multiplying the value of each weighting factor by its gradation factor and adding the four results. The formula for the index is as follows:

$$\text{C.I.M.} = 2\,\text{Ag} + 3\,\text{Lg} + 4\,\text{Rg} + 5\,\text{Eg}$$

An inspection of Table No. 1 reveals that the smallest possible clinical index is 11:

$$\text{C.I.M.} = (2 \times 1) + (3 \times 0) + (4 \times 1) + (5 \times 1) = 11$$

The highest possible figure which may be obtained is 55:

$$\text{C.I.M} = (2 \times 5) + (3 \times 3) + (4 \times 4) + (5 \times 4) = 55$$

Based upon such a calculation, patients may be placed in one of the three following grades:

Grade A. — 11 — 25 — Relatively benign.
Grade B. — 26 — 39 — Moderately malignant.
Grade C. — 40 — 55 — Highly malignant.

In order to determine the soundness of such an index as a guide to ultimate prognosis, we have surveyed 100 primary operable patients from the breast clinic without any attempt at selection. All of these patients were treated surgically with the addition of pre-operative and post-operative X-radiation.

Following are the gradings according to the clinical index of malignancy and the ultimate outcome:

TABLE NO. 2—CLINICAL GRADING

Grade A — Relatively Benign — 26 Patients			
Alive and well	5 years or more	18	— 69%
Dead within	1 year	0	
" "	2 years	2	
" "	3 years	3	
" "	4 years	2	
" "	5 years	1	
Grade B — Moderately Malignant — 51 Patients			
Alive and well	5 years or more	18	— 34%
Dead within	1 year	11	
" "	2 years	10	
" "	3 years	6	
" "	4 years	3	
" "	5 years	3	
Grade C — Highly Malignant — 23 Patients			
Alive and well	5 years or more	1	— 4%
Dead within	1 year	12	
" "	2 years	6	
" "	3 years	2	
" "	4 years	0	
" "	5 years	1	

It is apparent that a reasonably accurate prognosis can be given by the use of the clinical index, Grade A showing 69 per cent alive and well, 5 years or more after operation, compared with 34 per cent in Grade B, while in Grade C, but 1 patient, or 4 per cent, was without evidence of disease at the end of 5 years.

None of the patients graded "A" died within the first year, and but 2, or 9 per cent, within the first two years. A large number of the cases in Grade B succumbed to the disease in the first two years, 22 per cent dying in the first and 41 per cent within the two year period. Of the patients graded "C," more than one-half died within the first year and within the first two years 78 per cent had succumbed.

In order to determine whether the clinical or histological grading would furnish a more accurate prognosis, Dr. James Ewing has graded the same 100 cases, based solely upon histological study. He has placed them in one of three grades according to the degree of malignancy.

Following are the histological gradings:

TABLE NO. 3—HISTOLOGICAL GRADING

Grade I — Relatively Benign — 23 Patients			
Alive and well	5 years or more	12	— 52%
Dead within	1 year	1	
" "	2 years	4	
" "	3 years	5	
" "	4 years	0	
" "	5 years	1	
Grade II — Moderately Malignant — 63 Patients			
Alive and well	5 years or more	21	— 33%
Dead within	1 year	18	
" "	2 years	11	
" "	3 years	6	
" "	4 years	4	
" "	5 years	3	
III — Highly Malignant — 14 Patients			
Alive and well	5 years or more	4	— 29%
Dead within	1 year	4	
" "	2 years	3	
" "	3 years	0	
" "	4 years	1	
" "	5 years	2	

A study of Table No. 3 reveals that in the relatively benign group, 52 per cent of the patients were without evidence of disease five years or more after operation; whereas, by the clinical grading, 69 per cent of these more favorable patients were alive and well at the end of this period. In Grade II, 33 per cent survived five years, free from disease, a figure closely comparable to the 34 per cent obtained by the clinical grading. In Grade III, the histological grading showed 29 per cent alive and well at the end of five years compared to 4 per cent by the clinical grading. It is obvious that the histological grading fails to place a sufficient number of the more favorable cases in Grade I. Furthermore, it does not draw a sharp distinction between Grades II and III, for the figures for these two grades, for satisfactory five year results, are too closely comparable: Grade II—34 per cent, Grade III—29 per cent. A much wider divergence should appear to have the gradings of any significance.

In Grade I (histological) 4 per cent died within the first year compared to 0 per cent for those graded clinically, and within the first two years 22 per cent succumbed to the disease in comparison to 9 per cent for those in clinical Grade A. In Grade II (histological) 29 per cent died within the first year compared to 22 per cent of the clinically graded cases. Within the first two years 46 per cent succumbed to the disease, while 41 per cent of the patients, graded clinically died. In Grade III, 29 per cent died within the first year and 50 per cent within the first two years, in comparison to 50 per cent and 78 per cent for the clinically graded patients.

The following table matches up the five year results in 100 cases, and indicates how the patients in each clinical grade were graded histologically:

TABLE NO. 4—COMPARATIVE CLINICAL AND HISTOLOGICAL GRADINGS

CLINICAL GRADING		HISTOLOGICAL GRADING						
			Alive and well	1 year	2 years	3 years	4 years	5 years
Grade A								
Alive and well	18							
Dead within 1 year	0	Grade I	6		1	2		
" " 2 years	2	Grade II	10			1	2	1
" " 3 "	3	Grade III	2		1			
" " 4 "	2							
" " 5+ "	1							
Grade B								
Alive and well	18							
Dead within 1 year	11	Grade I	6	1	2	2		1
" " 2 years	10	Grade II	10	9	6	4	2	1
" " 3 "	6	Grade III	2	1	2		1	1
" " 4 "	3							
" " 5+ "	3							
Grade C								
Alive and well	1							
Dead within 1 year	12	Grade I			1	1		
" " 2 years	6	Grade II	1	9	5	1		1
" " 3 "	2	Grade III		3				1
" " 4 "	0							
" " 5+ "	2							

Inspection of Table No. 4 reveals several facts of considerable interest. In the relatively benign group (clinical) 10 of the patients, remaining alive and well, were placed in Grade II on a histological basis. It is evident that these patients should have fallen into the relatively benign rather than the moderately malignant group. Of the patients in Grade B (clinical) two of those remaining alive and well were considered Grade C cases, when the histological grading was followed. Of the highly malignant group, according to clinical grading, 9 of the patients who succumbed to the disease within one year,

were classified Grade II cases on a histological basis. It seems fair to conclude that the clinical grading made a more accurate selection of the patients than did the histological.

One reason for the failure of histological grading to provide a correct prognosis lies in the fact that different histological pictures, indicating varying degrees of malignancy, may be found in various portions of the same tumor. The study of a small section may reveal one type of histology where another section may show a much more malignant type of tumor growth. The study of large sections initiated by Sir George Lenthal-Cheatle, and first used in this country by Mr. Ellis, of the Laboratory force at Memorial Hospital, demonstrates the marked variation in histological pictures in different portions of the same tumor, and shows the difficulty of histological grading for any individual patient.

Moreover, histological grading fails to provide a correct prognosis because no consideration is given to those important clinical factors, which determine the ultimate outcome of the disease.

From this study, no doubt can exist that the histological grading is far less effective in furnishing an accurate prognosis than the clinical grading permits. We are firmly convinced that the grading of patients based upon the Clinical Index, gives a more accurate estimate of the type of disease and the ultimate prognosis than any other grading hitherto proposed.

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RESOLUTIONS PASSED AT THE STATED MEETING OF FEBRUARY 7, 1929

The Council appointed an Advisory Committee to each of the Sections in the Spring of 1928. A meeting of the Section officers was held subsequently at which Section matters were discussed. A special committee of the Council was appointed to consider certain suggestions and draft a proposed change in the By-Laws. This draft was approved by the Council and submitted to the Section officers, and has received their approval. It was referred to the Academy with the recommendation of the Council that it be adopted:

RESOLVED 1. That Section 4 of Article XVI be amended to read as follows:

At the March meeting the Chairman of each Section shall appoint a Nominating Committee of three Fellows of the Academy. This Committee shall present nominations for Chairman, for Secretary and for a member of the Advisory Committee at the April meeting. After the report of the Nominating Committee has been received other nominations may be made by any Fellow entitled to vote. These nominations shall be printed on the Academy folder and on the special announcements of the Section for the May meeting. At the May meeting the elections shall be by ballot and no Fellow who is not regularly assigned to the Section, or who is under suspension shall be entitled to vote or be eligible to office. The Secretary of each Section shall promptly notify the Recording Secretary of the Academy of the result of the election.

RESOLVED 2. That a new Section to be numbered 5 of Article XVI read as follows:

Each Section shall elect an Advisory Committee of five Fellows each of whom shall have been a Fellow for at least five years. The Advisory Committee shall advise the officers of the Section on all matters relating to the scientific work of the Section and on any other matters referred to it by the Section or its officers. The members of this Committee shall each serve for five years, one retiring and one being elected each year as provided in Section 4 of Article XVI. Vacancies may be filled at any meeting during the year, nominations and elections being made in the same manner as at the annual election.

3. The present Section 5 to be numbered 6.
4. The " " 6 " " " 7.
5. The " " 7 " " " 8.
6. The " " 8 " " " 9.
7. The " " 9 " " " 10.

PUBLIC HEALTH RELATIONS COMMITTEE
REPORT ON OPEN HOSPITALS IN NEW YORK CITY

The term hospital is used in this report to designate those tax-free institutions, supported by philanthropic contributions or by the city, county or state, which are used for the care of the sick, or injured. The numerous proprietary institutions, owned by an individual or group of individuals, and conducted for a financial profit are not considered in connection with the subject matter of this report.

An open hospital, in the broadest sense of the term, is one to which any physician, legally qualified to practice medicine, may send his patients, either to separate rooms or public wards, and there carry out any measures of diagnosis and therapy he considers desirable. In New York City procedures of a surgical nature may be carried out in such a hospital only by practitioners who possess the experience necessary for surgical work.

The argument for the open hospital is based on the following considerations:

1. Hospital experience affords opportunity for general and practical professional education not otherwise available. It brings about a raising of the level of professional ability of practicing physicians.

2. In the case of a charity patient the physician has the educational advantage of following through the course of the disease; in the case of the pay patient in addition to this, his professional and financial relations with the patient, begun outside of the hospital, continue after the patient's admission. In either case, continued attendance prevents a loss of professional prestige.

3. A patient sent to an open hospital receives such benefits as the hospital has to offer, and in addition remains

[1] On Dec. 26, 1928, the Council approved the publication of this report in the Bulletin.

under the care of a physician of his own selection, who maintains a personal interest in and responsibility for his welfare. This is to the general advantage of the patient. It results also in a better state of mind on the part of the patient.

4. Hospitals are public institutions in so far as they are tax-free and supported by the public. Their advantages should therefore be available to any member of the community and to all reputable physicians legally authorized to practice in the community.

5. The administration of an open hospital presents no insurmountable difficulty.

In brief, it is claimed that the open hospital offers educational advantages to the profession at large; that it protects the prestige and improves the financial status of the physician, and that it contributes to the welfare of the patient. It is from these standpoints that the Committee has studied the problem.

The discussion of the problem in its practical aspects in New York City calls for consideration of the pertinent facts in the situation.

The capacity of the tax-free hospitals in Greater New York is approximately 33,500 beds. This number includes beds in hospitals for chronic diseases but does not comprise the existing facilities in state or federal hospitals located within the city limits.

Sixty per cent of the beds are in hospitals maintained by private corporations and forty per cent in municipal hospitals. Approximately two-fifths of the beds are in special hospitals; this includes Sea View and other tuberculosis hospitals as well as those devoted to orthopedics, gynecology and obstetrics, oto-laryngology, ophthalmology, dermatology, neurology, cancer and contagious diseases.

In considering hospital opportunities for physicians in New York City, it should be borne in mind that the character of the work in the special hospitals requires pre-

liminary hospital training of a specialized character, and also that two-thirds of the service in general hospitals is of a surgical character. The total number of beds in the hospitals of New York devoted to the general run of medical cases does not exceed 6,400 to 6,500.

At the present time, the hospitals in New York City are scattered over a wide area and some are located at considerable distances from the principal population centers and are not easily available to physicians, except those residing in the neighborhood. Furthermore, only about ten per cent of the total bed capacity of the private hospitals is in single rooms and about fifteen per cent in the so-called semi-private rooms. The opportunities for private pay cases in the hospitals in New York City are therefore limited to but one-fourth of the 19,000 beds of the private hospitals. This constitutes but about seven per cent of the total bed capacity.

There are in New York City 10,877 physicians. Of this number five per cent are over sixty years of age, and about eight per cent are employed, on a full or part time basis, in the city service. The first group is close to the period of retirement from active work in the hospitals, and in the latter group there are not very many who have the time to give to active hospital work. There is probably at least another two per cent of physicians who are in executive positions in industrial, commercial, insurance and scientific corporations and who devote their entire time to these associations. Eliminating men on the hospital consulting staffs, over 39 per cent of the registered physicians in the City have hospital appointments. Some of these positions carry likewise responsibilities in the out-patient departments. In addition to those who have both hospital and out-patient affiliations, 11.5 per cent of the licensed physicians have dispensary services, thus making a total of almost 51 per cent having institutional affiliations.

Considering that 15 per cent of the physicians are either past the active period of their practice or are engaged in

public health, industrial or executive work, the percentage of those who are without institutional appointments resolves itself to approximately 34 per cent of the total. Many of these have, however, courtesy privileges in hospitals. In this connection the physical possibilities of hospital affiliations must be considered. At the present time in New York City there is one physician to approximately every 550 inhabitants, and the ratio of physicians to hospital beds is 1 to 3. The proportion of physicians having hospital affiliations in New York is greater than in many other large American cities, and much greater than in European communities. This showing is the more remarkable in view of the large number of physicians who have more than one hospital affiliation. The following table indicates the multiple affiliations of the four principal groups—physicians, surgeons, specialists and laboratory men. It will be seen from this table that the multiple connections occur most frequently in the case of laboratory men and surgeons, and least frequently among physicians; the specialists occupy the midground.

NUMBER OF AFFILIATIONS

(Excluding consultants)

	1	2	3	4 or more	Total
	%	%	%	%	%
Physicians	72.0	20.9	5.0	2.1	100
Surgeons	55.3	28.6	12.0	4.1	100
Specialists	62.7	25.2	8.3	3.8	100
Laboratory Men	53.1	23.5	10.2	13.2	100

Many of the multiple connections are explainable in view of the fact that 40 per cent of our hospital beds are in municipal hospitals which do not have private or semi-private facilities. The physicians and surgeons affiliated with these institutions seek other connections to do their private work. Aside from this, the multiple connections could and should be curtailed.

As hospital organization has developed, the long term continuous service, usually annual, has superseded the shorter rotating services and this has, in many instances

increased the number of opportunities of hospital affiliation because of the junior appointments. An analysis of the average number of ward beds per physician in the hospitals of this City leads to the conclusion that some hospitals have not absorbed a maximum number of men. Judging by averages, some hospitals like the N. Y. Post-Graduate, Polyclinic, Jewish of Brooklyn and the Beth David are overstaffed, while in St. Francis, the Roosevelt and the Woman's Hospital the ratio of the attending staff is below the average. It is of interest, as pointing to a desirable norm, that in such hospitals as the Presbyterian, New York, St. Luke's, Mount Sinai, Lenox Hill and the Methodist Episcopal of Brooklyn, the ratio of attending staff to ward beds is approximately 1 to 5.

A study of hospital affiliations by years in practice indicates that large groups of the attendings are in the younger age groups; only 26 per cent of the total number of attendings have been in practice over 25 years and less than 20 per cent from 21 to 25 years. The following table indicates the proportions of physicians, surgeons, specialists and laboratory men in hospital work, subdivided by quinquenia in practice.

YEARS IN PRACTICE AND HOSPITAL AFFILIATION

Physicians		Surgeons	Specialists	Lab. Men	Grand Total
Yrs. Out	%	%	%	%	%
1 - 5	13.3	5.6	5.7	2.	7.8
6 - 10	19.2	20.2	17.7	21.4	19.1
11 - 15	15.7	14.5	19.1	11.2	16.9
16 - 20	12.9	18.2	16.	22.5	15.4
21 - 25	13.	14.1	16.1	18.4	14.8
over 25	25.9	27.4	25.4	24.5	26.
Total	100	100	100	100	100

As would be expected, the proportion of the younger attendings in surgery and the specialties is smaller than in general medicine.

From an ideal community viewpoint every duly licensed practitioner should have opportunity for hospital affiliation. This, however, is impossible of realization in New York City at the present time, as the above statistical facts indicate. Constructive statesmanship calls for the best possible utilization of the existing opportunities from the standpoints of the welfare of the patient, economic advantages, and the educational opportunities for the physician.

Opportunities for graduate education in New York have increased greatly in recent years. In the medical sciences the Society of Experimental Biology and Medicine, the New York Pathological Society and the Harvey Society offer instructive programs. Any physician qualified to do so may carry on research work in a subject in which he is interested in the laboratories of the local medical colleges and of those of many of the hospitals. The Kings County Medical Society and the New York Academy of Medicine give series of practical lectures. The programs of the Academy Sections commonly include presentation of cases. The Committee on Medical Education of the Academy publishes lists of hospital and dispensary clinics which cover practically the entire field of medicine. Graduate courses covering a wide range of subjects are offered by certain hospitals and medical schools. At one of the medical schools there is a graded graduate course in surgery, leading to a hospital service. The hospital and medical school dispensaries, which include all branches of medicine, surgery and the specialties, afford opportunity for the study of methods of diagnosis and treatment, better in many instances than that given by hospitals. Any physician sufficiently ambitious can keep abreast of the advances in his subject. It is a matter of regret that a large number fail to do so. The clinics so extensively advertised are not well attended. The dispensary staffs are generally below their quota. Many graduate courses announced are not given because of the small number of applicants.

From what has been stated, this Committee feels warranted in believing that the medical profession in general is not making full use of the educational advantages at present available. Under such circumstances it might well be asked whether a demand for additional educational opportunities is sincere. That the open hospital offers striking educational opportunities has been assumed by those who favor it. The Committee is not convinced, however, that this is true to any appreciable extent. In the open hospital plan a physician sending his patient to the hospital carries out his own idea of treatment in a way not differing from that in his outside practice. There is no check or supervision of the procedures he employs, there is no one whose duty it is to serve as a teacher. In the open hospital the physician has no privileges as regards examination or study of hospital patients other than his own. Hospital rounds, discussion of cases, staff meetings, will in all probability not be carried out to any degree, however valuable these may be in principle, and however much they may be listed as available assets in a plan for open hospitals. It is true that diagnostic procedures may be more easily carried out, and therapeutic measures employed which require less personal effort on the part of the physician, but the advantage, speaking generally, is one not of education but of convenience, prestige, and profit.

That the prestige and financial status of a physician who has hospital privileges are improved is readily understandable. The abrupt termination of the professional relations between conscientious physician and his patient which occurs when the latter is sent to a hospital is an injustice to the physician. The remedy does not lie, however, in the open hospital. This matter will be referred to later in the suggestions made by the Committee.

The welfare of the patient is a matter of the first importance. A patient is sent to a hospital for the purpose of making diagnostic procedures more readily available, or of securing better medical treatment for his illness.

In regard to the first of these two reasons, the open hospital offers no advantages over the present system. In regard to the opportunity for better treatment, the matter is at least debatable. No system involving group coöperation may be considered perfect in practice. It is common knowledge that one hospital differs from another in general and specialized efficiency just as, for example, one surgeon differs from another in diagnostic ability and operative skill. A low ranking of one hospital does not condemn the system. There is no doubt that many of the group of unattached physicians are as competent as the members of hospital staffs but, looking at the matter from a broad standpoint, the Committee believes that the physicians attached to well organized hospitals are better prepared by experience and training to diagnose and treat disease than are those not attached. The hospital physicians are to be considered as specialists in their respective lines. The hospitals in which undergraduate teaching is done represent the best type under the present system. The members of the attending staff have had as a rule a thorough dispensary apprenticeship, and, in general, have been selected because of special fitness. There are graded positions with a definite responsibility attached to each, leading up to that of the director, who is responsible for the entire service. Appointments, tenure of office, and promotions are based on the excellence of the work done. There is no question that ward patients in such hospitals receive expert medical diagnosis and treatment. A close coöperation between the various divisions adds further to this. In addition to the advantages offered the patient, such hospitals serve another and perhaps equally important purpose. Through the careful study of disease they make possible the advances in medical knowledge which are for the good of all. While there is no doubt that many hospitals fall far below the type described, they are all striving for improvement, and the standards are constantly rising.

In regard to the problem of administration of the open hospital, the opinions of a number of hospital executives

have been obtained. All agree that the open hospital makes the task of administration very difficult. It creates confusion in the nursing system, in the training and supervision of the intern staff and in the matter of record keeping. As a result hospital discipline suffers and the effectiveness of the hospital falls below the prevailing standard of the ordinary hospital. Great advantages from other standpoints must be assured to offset the disadvantages that would arise from the change in the present administrative system in New York hospitals. The conditions of hospital organization which obtain in other sections of the country and in the small communities of the East are different from those prevailing in New York City where a large and diverse population creates problems that are existent nowhere else. A single hospital in a small community has a disciplinary and social control of its doctors by reason of the relative smallness and compactness of the community that cannot possibly be obtained in the metropolitan area of New York City.

Appreciating the advantages of clinical experience and study, the Committee suggests that dispensaries can be made much more useful for younger men. With an experienced teacher as head of each dispensary division with a rotating service for the younger men, whereby each is assigned for a suitable time to each of the divisions with a sufficient number of physicians in attendance to allow of thorough work on patients, with staff discussions and consultations—the advantages of the dispensary for general post-graduate education are unequalled. Furthermore, it is not a difficult matter to arrange a close connection between dispensary and hospital. One of such plans is hereby presented as illustrating a method of close tie-up between the hospital and the dispensary. Let each physician entering out-patient service understand that he is expected to devote eight years to dispensary work; this time to be divided into four periods, each of two years' duration. During the first two periods his work is to be limited to the out-patient department exclusively; during the second two terms his time will be divided between the

hospital and the dispensary. As he enters upon the third term of his service in the out-patient department, he simultaneously begins his first term in the hospital as an assistant visiting physician of the lowest rank. In two years he becomes the chief of the out-patient clinic and graduates to the next highest rank in the hospital. After eight years of service during four of which he held rank on the visiting staff of the hospital, he may step out, enriched by the valuable association with the hospital and by the experience gained in supervised team work, or if he has demonstrated his ability he becomes eligible for appointment on the permanent staff.

Such a plan, with modifications to suit various situations, would enable a larger number of men to form hospital connections than is now feasible; would render dispensary work more worth-while and sought for; would link the out-patient department more closely with the hospital, with resultant benefit to the patients and the community and would raise the general standard of medical practice in the community. Energetic efforts to develop to the full the post-graduate opportunities of the dispensary should be made. The physicians, however, must show that they are willing to work to make the efforts worth while.

As has been stated above, the number of physicians attached to hospital staffs can be increased with advantage to the hospital. As pointed out earlier in the report, the proportion of physicians to ward beds varies from 1 to 1 to 1 to 11. A proportion of 1 to 5 is considered a workable one. Such a proportion is conducive to concentration of effort on a small group of patients, and hence affords more opportunity for the study and care of each patient.

The courtesy privileges afforded by certain hospitals may be made more general. The hospital should insist, however, that those who apply for courtesy privileges should prove that they possess the necessary qualifications. Opportunity should be given to the members of the cour-

tesy staffs to study other patients, and to take part in ward rounds and staff discussions.

Physicians sending patients to hospitals should be considered as being in consultation on their cases and not as is sometimes the case as intruders when they come to the hospital. There is no reason why these physicians should not receive remuneration in return for any service rendered while the patient is in the hospital.

There is room for a very considerable number of volunteer workers in many of the New York hospitals. In the plan the Committee presents herewith for consideration, a physician desiring hospital experience, will apply to the director of the service desired. He will be required to spend daily in the hospital at least the same amount of time as is required of members of the staff. The director will assign him work to do, the nature of which will depend on the physician's training. In time, and this will vary with the individual, he will have the necessary qualifications for appointment to the staff of a hospital. Possession of those qualifications should afford courtesy privileges in the hospital in which he is working and in others as well. The number of volunteer workers who could be taken into the numerous hospitals of New York is a considerable one. A single large general hospital might easily accommodate fifty men or more. Each hospital taking part in the plan would serve as a graduate school, and much could be accomplished not only in this direction but also in a closer study of the patients themselves. The success of any such plan as this would depend largely on the enthusiasm of the director and his staff and their willingness to serve as supervisors and teachers of the volunteer workers.

Summary

1. Of the larger cities, New York provides physicians with the greatest opportunities for hospital affiliation. In practically all instances, a physician with ambition, industry, honesty of purpose and ability to coöperate with

others can secure a position in a good hospital if he is willing to serve the necessary apprenticeship.

2. Through the gradual education of the public, there has come a general appreciation of the facilities offered by the hospital for diagnosis and treatment. Progress in clinical medicine has come about mainly through the hospital. Because of its trained staff, the work in the closed hospital is carried out more efficiently than in the open hospital, and the patient is better served in a closed hospital than in an open one. The present system contributes to the advancement of medical knowledge and welfare of the individual patient.

3. The opportunities for professional education offered by a hospital affiliation are obvious. The failure on the part of so many physicians to take advantage of existing educational opportunities throws doubt on the argument that the open hospital will bring about an appreciable improvement in professional attainment. The hospital connection in itself means little, if anything, in this connection. It is the opportunities that go with it that are important. Since available facilities for professional improvement are so little utilized, the claim that those offered by the open hospital will be so used, carries no conviction. The sincerity of the demand for open hospitals on a basis of opportunity for research and education may be questioned.

4. There is place for certain improvements in the details of hospital organization.

5. While some hospitals may seem to be overstaffed, others can add to their attending staffs without interfering with the present efficiency of their work. A ratio of one member of attending staff to every five ward beds prevails in many of the best organized hospitals.

6. A large proportion of our hospital facilities are in the municipal hospitals to which no private patients are admitted. Those who attend the non-pay patients in the municipal hospitals seek other appointments in voluntary

hospitals where they can carry on their private work. From the community point of view and that of medical efficiency, overlapping multiple appointments are unnecessary and undesirable, except one appointment in a private hospital in addition to service in a municipal hospital.

7. The union between the out-patient department and the hospitals is not as close in many institutions as it should be for the benefit of the patients as well as for educational opportunities and advancement of the profession.

8. Insofar as New York City is concerned, the open hospital plan is unnecessary, undesirable and impractical at the present time. All that is claimed for the open hospital can be obtained equally well and much more simply by modifications of the present system.

Recommendations

1. All hospitals which are not fully manned should be urged to increase their staffs to a point compatible with greatest efficiency.

2. In principle, no member of the attending staff should have more than one active hospital appointment, with the exception of those who serve on the visiting staffs of municipal hospitals where no private patients can be accommodated.

3. When a patient is sent to a hospital by a physician not on that hospital staff, every effort should be made by the hospital authorities to continue the contact between the patient and the physician who referred the patient. In cases of patients occupying private or semi-private accommodations in the hospitals, the family physician making professional visits may with propriety charge for his services.

4. Courtesy privileges granted by hospitals should be made available to the greatest possible number of physicians who have proven themselves properly qualified.

5. The plan of making places in hospitals for volunteer physicians should be seriously considered and adopted wherever possible.

6. The dispensary or the out-patient department should be more developed as a place for graduate teaching and it should be integrated with the work of the hospital along the lines laid down in the body of the report.

COMMITTEE ON MEDICAL EDUCATION

SECOND ANNUAL GRADUATE FORTNIGHT

The Academy is making arrangements for a second series of lectures at the Academy, coördinated clinics, clinical demonstrations and courses in hospitals and teaching institutions of New York, on the subject of "Functional and Nervous Problems in Medicine and Surgery." The Fortnight will be held during the period October 7th to 19th, 1929.

It is believed that this year's subject will attract not only the medical profession generally but also social workers and those especially interested in public welfare. The field includes those functional disturbances which have been much neglected in the last thirty years in comparison with the structural disturbances of the human body.

Evening sessions will be held at the Academy at which well known authorities will discuss many phases of the general subject. During the mornings and afternoons specially prepared clinical programs will be presented in a number of the leading hospitals of the city. It is planned to present a full day's clinical program in each hospital co-operating in the Fortnight. Among the special subjects which will be considered in the lectures and clinical program are:

Sleep and insomnia
Headache and migraine
Endocrines and the vegetative system
The involuntary nervous system
General survey of visceral neuroses
Metabolism and the vegetative nervous system
Allergy and the nervous system
The surgery of the vegetative system
Traumatic neuroses
Post-operative neuroses
The psychoneuroses
The cardiac neuroses
The digestive neuroses
The vascular neuroses
Shock
Psychotherapy
Hysteria
Mental hygiene in connection with general practice
Habit and conduct problems

The profession is generally invited to attend. No fee will be charged for attendance at any of the meetings or clinics on the program.

RECENT ACCESSIONS TO THE LIBRARY

Avery, E.; Dorsey, J. & Sickels, V. A. First principles of speech training.
N. Y., Appleton, 1928, 518 p.

Baumgärtner, K. H. Kranken-Physiognomik. Neuausgabe.
Berlin, Madaus, 1928, 222 p.

Bower, A. G. & Pilant, E. B. Communicable diseases, for nurses and mothers.
Phil., Saunders, 1929, 327 p.

Bucky, G. Grenzstrahl-Therapie.
Leipzig, Hirzel, 1928, 153 p.

Castellani, A. Fungi and fungous diseases.
Chic., Amer. Med. Assoc., [1928], 203 p.

Chandler, F. G. & Wood, W. B. Lipiodol in the diagnosis of thoracic disease.
London, Milford, 1928, 133 p.

Charlin C., C.; Lobo-Onell, C. & Barrenechea A., S. La retinitis albuminúrica.
Barcelona, Salvat, 1928, 128 p.

Chesser, (Mrs.) E. M. S. Child health and character.
N. Y., Oxford Univ. pr., 1927, 204 p.

Collins, J. The doctor looks at marriage and medicine.
Garden City, Doubleday, 1928, 313 p.

Cushing, H. W. Consecratio medici, and other papers.
Boston, Little, 1928, 276 p.

Daudet, L. Mélancholia.
Paris, Grasset, [1928], 298 p.

Dayton, H. Practice of medicine.
5. ed., Phil., Lea, 1928, 340 p.

von Domarus, A. Einführung in die Hämatologie.
Leipzig, Thieme, 1929 [1928], 185 p.

Ellis, R. S. The psychology of individual differences.
N. Y., Appleton, 1928, 533 p.

Fisher, A. G. T. Chronic (non-tuberculous) arthritis.
London, Lewis, 1929, 232 p.

Fürst, K. Grundriss der Arzneimittellehre für die Behandlung von Hautkrankheiten.
Leipzig, Thieme, 1928, 144 p.

Garesché, E. F. The soul of the hospital.
Phil., Saunders, 1928, 207 p.

Hatschek, E. The viscosity of liquids.
London, Bell, 1928, 239 p.

Höber, R. Lehrbuch der Physiologie des Menschen.
4. Aufl., Berlin, Springer, 1928, 580 p.

Hollingworth, L. S. The psychology of the adolescent.
N. Y., Appleton, 1928, 227 p.

Hübner, A. H. Die psychiatrisch-neurologische Begutachtung in der Lebensversicherungsmedizin.
Leipzig, Thieme, 1928, 170 p.

Hurry, J. B. Imhotep.
2. ed., [London], Milford, 1928, 211 p.

van Kerckhoff, J. H. P. Beiträge zur Kenntnis der Psoriasis vulgaris und ihrer Behandlung.
Leipzig, Hirzel, 1929, 273 p.

Keyes, E. L. Urology.
N. Y., Appleton, 1928, 763 p.

Klein, A. C. & Thorburn, G. Employment of the tuberculous.
[N. Y.], N. Y. Tuberculosis and Health Assoc., 1928, 71 p.

Krause, A. K. Factors in the pathogenesis of tuberculosis.
Balt., 1928, 43 p.

Lambourne, H. & Mitchell, J. A. Qualitative and volumetric analysis for medical students.
London, Milford, 1928, 64 p.

Malloch, A. William Harvey.
N. Y., Hoeber, 1929, 103 p.

Metzger, M. L'accoucheur moderne. Précis d'obstétrique.
Paris, Alcan, 1928, 602 p.

Olson, L. M. Improved equipment in the home care of the sick.
Phil., Saunders, 1928, 109 p.

Petty-Southwell (The) correspondence.
London, Constable, 1928, 343 p.

Pirquet, C. & Wagner, R. Die Ernährung des Diabetikers.
Berlin, Urban, 1928, 191 p.

Roqueta, G. La albuminuria en las enfermedades internas.
Barcelona, Salvat, 1928, 365 p.

Rowe, A. H. A handbook for the diabetic.
N. Y., Oxford Univ. pr., [1928], 129 p.

Seashore, C. E. Psychology in daily life.
N. Y., Appleton, 1928, 225 p.

Stewart, H. E. Physiotherapy, theory and clinical application.
2. ed., N. Y., Hoeber, 1929, 395 p.

Taylor, R. A. Leonardo the Florentine. A study in personality.
New York, Harper, [1928], 580 p.

Transactions of the Academy of conservative proctology. 1928. 5. Session.
[St. Augustine, 1928], 352 p.

von Uexküll, J. Theoretische Biologie.
2. Aufl., Berlin, Springer, 1928, 253 p.

Walker, K. M. & Walker, E. M. On being a father.
London, Cape, [1928], 192 p.

Wolfers, F. Eléments de la physique des rayons X.
Paris, Hermann, 1928, 336 p.

PROCEEDINGS OF ACADEMY MEETINGS

JANUARY

Annual Meeting

Thursday Evening, January 3, at 8:30 o'clock

ORDER

I. Executive Session

Reading of the minutes

Election of Fellows

Address of Retiring President—The Academy as an Educational Center, Samuel W. Lambert

Address of Incoming President—The Academy, the Profession and the Public, John A. Hartwell

Reports of Council, Trustees, Treasurer, Committees and Sections

II. Address

A study of the streptococcus in the etiology of arthritis with demonstration of arthritic lesions experimentally produced, Reginald Burbank

Thursday Evening, January 17, at 8:30 o'clock

The Fourth Harvey Lecture

Urine formation as illustrated by an experimental nephritis, William deB. MacNider, Kenan Research Professor of Pharmacology, University of North Carolina

Peyton Rous, President Harvey Society
Philip D. McMaster, Secretary Harvey Society

This lecture takes the place of the second Stated Meeting of the Academy for January

Section Meetings

Section of Dermatology and Syphilis

Wednesday Evening, January 2, at 7:45 o'clock

Attention is called to the change in date and hour of meeting

ORDER

I. Presentation of Patients

(a) Cases from the clinic of the University and Bellevue Hospital Medical College, Howard Fox, Edward R. Maloney, Walter J. Highman, Frank C. Combes, Jr., Leo Spiegel, Louis Tulipan, Harry C. Saunders, David Bloom, Rudolph Boenke, Paul E. Bechet, Eugene F. Traub

(b) Miscellaneous Cases

II. Discussion

III. Executive Session

SECTION OF SURGERY

Friday Evening, January 4, at 8:30 o'clock

ORDER

I. READING OF THE MINUTES

II. PRESENTATION OF CASES

(a) 1. Birth constriction of the leg; simple operative repair
2. Abnormal relaxation of tissues of the face; plastic repair
3. Contracture of both axilae following burn; a method of skin transplantation
4. A case of hemolytic streptococcus gangrene of the upper extremity: Result after seven years, John H. Garlock
5. Chronic bone abscess of the phalanx

(b) 1. Comminuted fracture of the elbow with closed reduction; one case
2. Demonstration of specimen; spindle cell sarcoma involving liver and stomach, Condict W. Cutler, Jr.

(c) Malignant goitre; four cases, Edward W. Peterson

(d) Two cases, Frank L. Meleney

(e) Four cases, Arthur S. MacQuillan

III. PAPERS OF THE EVENING

(a) The treatment of acute post operative thyroid toxemia, Arthur S. McQuillan

(b) The importance of early diagnosis and early operation in hemolytic streptococcus gangrene, Frank L. Meleney

IV. GENERAL DISCUSSION

V. EXECUTIVE SESSION

SECTION OF PEDIATRICS

Thursday Evening, January 10, at 8:30 o'clock

ORDER

I. PAPER OF THE EVENING

The role of focal infections in the production of gastro-intestinal symptoms in infants and children

a. Clinical aspects, McKim Marriott (by invitation)

b. Chemical changes in the body, A. F. Hartmann (by invitation)

Discussion, Ruth C. Sullivan, Ph.D. (by invitation), Lynne A. Hoag (by invitation), Oscar M. Schloss, Charles H. Smith

Joint Meeting of the

SECTION OF OTOLOGY

and the

SECTION OF NEUROLOGY AND PSYCHIATRY

Friday Evening, January 11, at 8:30 o'clock

ORDER

I. READING OF THE MINUTES

II. PAPERS OF THE EVENING

a. Diagnosis of brain abscess, Foster Kennedy

b. Treatment of otological brain abscess, Harry P. Cahill, Boston (by invitation)

c. The neuro-surgical treatment of brain abscess, Joseph E. J. King

Discussion, Edward B. Dench

III. GENERAL DISCUSSION

SECTION OF HISTORICAL AND CULTURAL MEDICINE

Friday Evening, January 11, at 8:30 o'clock

Kindly note change in date

ORDER

I. READING OF THE MINUTES

II. PAPERS OF THE EVENING

a. The papyrus industry, with some remarks on the Edwin Smith papyrus, C. N. B. Camac

b. Medicine in the study of the classics, Fred B. Lund, Boston (by invitation)

III. EXECUTIVE SESSION

Regarding change of date of meetings

SECTION OF MEDICINE

Tuesday Evening, January 15, at 8:30 o'clock

ORDER

Program Presented by the Department of Medicine, Yale University

I. PAPERS OF THE EVENING

a. Serum electrolytes in nephritic edema, J. P. Peters (by invitation)

b. Serum proteins in malnutrition, F. S. Bruckman (by invitation)

c. The production of edema and serum protein deficiency in rats by low protein diets, Robert A. Frisch (by invitation)

d. Observations on nystagmus, James C. Fox, Jr. (by invitation)

e. Pneumococcus Type III pneumonia, Francis G. Blake (by invitation)

Discussion, Donald D. Van Slyke (by invitation), Russell L. Cecil

SECTION OF GENITO-URINARY SURGERY

Wednesday Evening, January 16, at 8:30 o'clock

ORDER

I. READING OF THE MINUTES

II. PRESENTATION OF CASES

a. 1. Congenital polycystic nephritis—nephrectomy—specimen and patient

2. Echinococcus cysts of kidney—nephrectomy—specimen
Maurice Meltzer (by invitation)

b. Multiple lithiasis of prostate—specimen, Victor C. Pedersen

III. Papers of the Evening

a. Renal compression, Joseph C. Ferrer, San Juan, Porto Rico (by invitation)
Discussion by Edwin Beer

b. Address, Colonel L. W. Harrison, Ministry of Health, Great Britain (by invitation)

c. Vesical rupture, Meredith F. Campbell
Discussion by Edward L. Keyes, A. Raymond Stevens

Section of Orthopedic Surgery

Friday Evening, January 18, at 8:30 o'clock

ORDER

I. Reading of the Minutes

II. Presentation of Cases

a. Two interesting hand cases, Leo Mayer

b. 1. Osteitis-fibrosa cystica with pathological fracture
2. Potts disease treated by multiple tibial grafts
3. Fracture of femur treated by sliding bonegraft, Charles Murray Gratz (by invitation)

c. Cases illustrating the paper of the evening, George Anopol (by invitation)

III. Paper of the Evening
Extra-articular arthrodesis of the hip joint, Fred H. Albee

IV. Discussion

Section of Ophthalmology

Monday Evening, January 21, at 8:30 o'clock

ORDER

I. Reading of the Minutes

II. Clinical Cases

a. Complete paralysis external rectus, transplantation of vertical rectitendons, Ben Witt Key
Discussion, James W. White, Conrad Berens, Ernest F. Krug, Rudolf Aebli

b. Report of a case of dermoid of the ethmoid sinus, with orbital symptoms, James W. Babcock
Discussion, Arnold Knapp, Lewis W. Crigler

c. 1. Report of a case of metastatic carcinoma of the ciliary body, with subsequent history of the patient
2. Report of a case of cavernous angioma of the orbit causing pressure symptoms on the eye ball, Arnold Knapp
Discussion, Martin Cohen

d. 1. Case of traumatic pulsating exophthalmos
2. Case of haemangioma of the orbit, Martin Cohen

e. Two cases of guttate keratitis, George W. Smith
Discussion, Arnold Knapp

f. Case of tumor of the conjunctiva, Thomas H. Curtin
Discussion, Martin Cohen

g. Case of mucous membrane graft from the mouth to the eye for pannus, Ernest F. Krug

III. Demonstration

Fitting of artificial eyes with especial reference to gold ball implantation, Mr. Pierre Gougelmann (by invitation)
Discussion, Arnold Knapp

A new discission scissors and a new needle holder constructed and shown by Samuel P. Oast

IV. Paper of the Evening

Transplantation of buccal mucous membrane with curative measure in eye diseases, Rudolf C. Denig

Discussion, Thomas H. Curtin, Ernest F. Krug, Arnold Knapp, Francis W. Shine, David H. Webster, Giovanni Paccione, Ernst Waldstein, Lewis W. Crigler

V. Executive Session

Section of Obstetrics and Gynecology

Tuesday Evening, January 22, at 8:30 o'clock

order

I. Reading of the Minutes

II. Papers of the Evening

a. Uterosalpingography. With special reference to
(a) technic
(b) absence of untoward reaction
(c) therapeutic application

Lantern slide demonstration, Julius Jarcho

Discussion, Charles Gottlieb, Robert Lyness McCready (by invitation), I. C. Rubin

b. Color motion pictures as an aid in teaching gynecology, Thomas H. Cherry

c. The transverse lower segment incision in caesarean section, Frederick C. Irving (by invitation)

Discussion, Ralph Munson Beach (by invitation), Alfred C. Beck, Wilbur Ward

III. General Discussion

IV. Executive Session

SECTION OF LARYNGOLOGY AND RHINOLOGY

Wednesday Evening, January 23, at 8:30 o'clock

Kindly note change of hour

New York Post-Graduate Hospital Night

ORDER

I. READING OF THE MINUTES

II. PRESENTATION OF PATIENTS

a. Bronchiogenetic cyst of larynx removed by thyrotomy, C. J. Imperatori
Discussion, Louise H. Meeker (by invitation)

b. Dysphonia spastica, Leopold I. Glushak

c. Sarcoma of right ethmoid and antrum, radium implantation

d. Carcinoma of right ethmoid, antrum and sphenoid, radium implantation, Duncan Macpherson

e. Nasopharyngeal fibroma, radium implants, Simon L. Ruskin (by invitation)

f. Large squamous cell carcinoma, external nose, radium implants

g. Rhinoscleroma, radium applications, G. Allen Robinson

h. Sarcoma of nose and pharynx, Alexander F. Laszlo (by invitation)

III. REPORT OF CASES

a. Pituitary tumor (specimen), Alexander F. Laszlo (by invitation)

b. Carcinoma of tongue, radon seeds used

c. Carcinoma of larynx (2 cases) inoperable

d. Cardiospasm, child (Roentgenograms)

e. Stricture of oesophagus, congenital (?), Frank Richard Herriman

IV. PAPER OF THE EVENING

Tumors of the nose and throat related to developmental defects, Louise H. Meeker (by invitation)
Discussion, Ward J. MacNeal

V. CINEMATOGRAPHIC PRESENTATION IN COLORS

Nasal disfigurement, J. Eastman Sheehan

FELLOWS ELECTED JANUARY 3, 1929

Benjamin Roy Allison.....Ives Road, Hewlet, L. I.
Murray Lampel Brandt.....1362 Grand Concourse
Vernon Branham.....105 East 22nd Street
Robert Buckley.....781 Madison Avenue
Carloss James Chamberlin.....114 East 54th Street
H. Rawle Geyelin.....103 East 78th Street
Muriel Ivimey.....104 East 40th Street
William A. Kellogg.....48 West 51st Street
James Rufus Lincoln.....63 Park Avenue
Foster Murray.....80 Hanson Place, Brooklyn
Osborn Poor Perkins.....8 East 54th Street
Harry James Perlberg.....921 Bergen Avenue, Jersey City, N. J.
Joseph Schwartz.....1018 East 163rd Street
Arnold Shamaskin.....Bedford Hills, New York
Harold John Shelley.....1148 Fifth Avenue
Maurice J. Strauss.....193 York Street, New Haven, Conn.
Alvin Murray Street.....565 Park Avenue
Charles Baker Thompson.....149 East 40th Street
Manuel Uribe Troncoso.....515 West End Avenue
Joseph Turner.....1 East 100th Street
Frederick H. von Hofe.....255 Conway Court, South Orange, N. J.
Randolph West.....620 West 168th Street

AND FOR ASSOCIATE FELLOWSHIP

Raemer Rex Renshaw, Ph.D.....New York University
Homer William Smith, Sc.D.....338 East 26th St.

DEATHS OF FELLOWS OF THE ACADEMY

Thomas Rushmore French, M.D., 469 Clinton Avenue, Brooklyn, New York; graduated in medicine from the College of Physicians and Surgeons, New York City, in 1871; elected a Fellow of the Academy March 4, 1886; died January 5, 1929. Dr. French was a Fellow of the American College of Surgeons, a member of the American Laryngological Society, a member of the Pathological Society and a member of the Pediatric Society. He was Consulting Laryngologist to the Kings County, Long Island College Hospital Medical College, Brooklyn and Jewish Hospitals.

George Alfred Lawrence, M.D., 666 Madison Avenue, New York City; graduated in medicine from the College of Physicians and Surgeons, New York City, in 1895; elected a Fellow of the Academy March 5, 1903; died December 28, 1928. Dr. Lawrence was a Fellow of the American Medical Association and a member of the Neurological Society.

DATES OF ACADEMY MEETINGS

STATED MEETINGS

1st and 3rd Thursdays.

SECTION MEETINGS

Dermatology and Syphilis, 1st Tuesday.
Surgery, 1st Friday.
Neurology and Psychiatry, 2nd Tuesday.
Pediatrics, 2nd Thursday.
Otology, 2nd Friday.
Ophthalmology, 3rd Monday.
Medicine, 3rd Tuesday.
Genito-Urinary Surgery, 3rd Wednesday.
Orthopedic Surgery, 3rd Friday.
Obstetrics and Gynecology, 4th Tuesday.
Laryngology and Rhinology, 4th Wednesday.
Historical and Cultural Medicine, 2nd Wednesday of November, January, March and May.

TRUSTEES, COUNCIL AND COMMITTEE MEETINGS

Trustees, 4th Wednesday.
Council, 4th Wednesday.
Committee on Admission, 1st Wednesday.
Committee on Library, 2nd Tuesday.
Public Health Relations Committee, Mondays.
Committee on Medical Education, 2nd Thursday.
Committee on International Medical Relations, 3rd Wednesday.

DONATIONS TO THE LIBRARY FUNDS

Donations and bequests are solicited by The New York Academy of Medicine for the maintenance and expansion of the Library.

A donation or bequest of $5,000 or more will provide for a special library fund, the income of which may be used for the general purposes of the Library or restricted to the purchase of books and periodicals, as the donor or testator may indicate.

FORM OF BEQUESTS

The following is a brief legal form as a suggestion under which bequests may be made in behalf of the Academy:

I give, devise and bequeath unto "The New York Academy of Medicine" of the City of New York, State of New York, a corporation duly incorporated by the Legislature of the State of New York by an act entitled, "An Act to Incorporate The New York Academy of Medicine," passed June 23, 1851, and amended June 4, 1853, June 2, 1877, and April 24, 1925,.....